

Annual Report and Accounts 2018



NatWest
Markets

Financial review

	Page
Strategic report	
Chief Executive's Statement	1
Business overview	1
Presentation of information	3
Performance overview	3
Board of directors and secretary	7
Top and emerging risks	8
Capital and risk management	10
Report of the directors	49
Statement of directors' responsibilities	51
Financial statements	52
Risk factors	125
Forward-looking statements	134



Chris Marks
Chief Executive, NatWest Markets

Chief Executive's Statement

2018 was an important year for NatWest Markets as we became NatWest Markets Plc, a UK non ring-fenced bank. It was also a challenging year for us and for our clients. We continued to work closely with them to help navigate volatile market conditions, political uncertainty and regulatory changes. We supported our clients through our transition to NatWest Markets Plc to comply with the UK's ring-fencing rules and, at the same time, maintained strong capital, funding and liquidity positions. We were assigned an investment grade senior unsecured debt rating by Fitch, Moody's and Standard & Poor's.

Relationships built on colour, content and ideas

We are very proud of the strong partnerships we have with our clients around the world. Our ability to anticipate the broad range of risk management and financing challenges they face means we are able to tailor solutions to help them address those challenges. Our teams in Europe, the US, and Asia have had real success building client trust by consistently and proactively providing them with relevant market colour, content and ideas, backed up by seamless trade execution and delivery of innovative solutions. We are supporting our clients through the uncertainties of Brexit. When the UK leaves the European Union (EU), our plan is to continue to work with our European Economic Area (EEA) clients from our bank in the Netherlands, NatWest Markets N.V..

Our people

We have demonstrated our ability to attract talented, diverse, driven people and we are committed to helping them reach their potential. The results from our 2018 employee survey were the best we have ever reported. All key measures have improved and the majority of our scores are now above the global financial benchmark. Our strong results were also echoed in this year's Banking Standards Board assessment which showed that, across a range of measures, we have made more progress than our peers.

A simpler business

As the world around us changes, we are changing with it. We are embracing the power of new technology so we are better able to provide clients with insights and solutions, drive cost efficiencies and increase profitability. By continuing to automate and simplify our business and its processes we have radically improved our operating model. We have taken out many manual processes and improved control and efficiency resulting in a much improved customer experience.

Looking forward

Staying close to our clients is really important to us – helping them to navigate the challenging times ahead and achieve their short and long-term goals. We will keep adapting and evolving our business to make it simpler and more efficient, while supporting the RBS Group to deliver its 2020 strategic goals. Our investment in new technology will continue. We look forward to working in new and different ways, creating an environment where our people can thrive and where talent and diversity of thought are paramount.

Chris Marks
CEO, NatWest Markets

Business Overview

NatWest Markets helps global financial institutions and corporates manage their financial risks and achieve their short and long-term financial goals while navigating changing markets and regulation. We do this by providing global market access, financing, risk management and trading solutions. We continue to put customers at the centre of the way we do business. We have focused on the core products and markets where we have a strong track record, longstanding relationships and market leading positions. We have been evolving the way we operate and we are investing in new technology to enhance the way we provide financial solutions to our customers.

Our operation

We operate from trading hubs in London, Singapore and Stamford with sales offices across key locations in the UK, EU, US and Asia.

Trading & Flow Sales team - provide liquidity and risk management in rates, currencies, credit and securitised products through a combination of voice and electronic delivery. It is focused on providing best in class colour, content and ideas to customers and leveraging technology and automation across flow products.

Financing & Risk Solutions team - built around integrated financing, debt capital markets and risk management solutions, on a foundation of insightful content and structuring. It is focused on sourcing appropriate capital and funding for customers and providing innovative solutions to help manage their risks and optimise their balance sheets.

Our Products

Rates

We are a leading sales and trading house across cash bonds, repo, swaps, options and inflation. We offer primary dealer services to thirteen national debt management offices and are a market maker in sterling, euro and dollar debt as well as being a leading interest rate derivatives house.

Currencies

We provide FX services to global financial institutions and corporates offering high value content, bespoke risk management solutions and strong digital delivery through electronic platforms and venues. We are highly rated by corporates and this is reflected in our awards and rankings for this customer group. Our products include: spot FX, FX forwards, FX swaps and FX options across G10 and emerging markets currencies. AgileMarkets™ is our single dealer platform, providing FX trading, analysis, desk strategy, sales commentary and post trade commentary to customers.

Financial review

Business overview continued

Financing

We bring together our primary market, bi-lateral financing and secondary market distribution to connect issuers with investors. We offer all mainstream bond financing activities (including investment grade, private placements, medium-term notes (MTNs), hybrids and liability management), asset backed financing and primary lending products. This platform is supported by sales and trading across securitised products, cash bonds, investment grade and high yield loans.

Awards and rankings

- Sterling Bond House of the Year 2018 (Source: International Financing Review (IFR))
- #1 for Overall Service Quality for UK Corporates (Source: 2017 Greenwich Associates FX Survey)
- #1 for GBP-denominated DCM by volume in 2018 (Source: Dealogic)
- Tied #1 for Rates* Service Quality – UK FIIs (*Government Bonds and Interest Rate Derivative Investors) (Source: Greenwich Associates, European Fixed Income 2018 – Rates)
- Best GBP Bond Dealer of the Year and Best Sterling CP Dealer 2019 (Source: Capital Markets Data)
- Best Order Management (Source: Profit & Loss 2018 Digital FX Awards 2018)
- Best in Service Globally among Corporates for Algorithmic trading (Source: 2018 Euromoney FX Survey)
- Most Innovative Team of the Year (Source: The Banker's Investment Banking Awards 2018)

UK ring-fencing

The UK ring-fencing legislation requires the separation of essential banking services from investment banking services from 1 January 2019.

During 2018 the RBS Group reorganised its group legal entity structure and business model to meet the legislation. RBS Group now operates with a ring-fenced bank sub-group structure and multiple entities outside the ring-fence. NatWest Markets Plc is a non ring-fenced bank of the RBS Group and provides investment banking services to global financial institutions and the RBS Group's business, commercial and corporate customers.

On 30 April 2018, RBS plc was renamed NatWest Markets Plc and undertaken a number of business transfers in April 2018 and August 2018 to align business segments to deliver the RBS Group's plans.

Since November 2018, we, as NatWest Markets Plc, have managed our own capital, liquidity and funding separately from the rest of the RBS Group.

NatWest Markets N.V.

NatWest Markets N.V. (formerly Royal Bank of Scotland N.V.), the RBS Group's banking entity in the Netherlands, continues to implement its plan to be operationally ready to serve our EEA customers when the UK leaves the European Union on 29 March 2019. NatWest Markets N.V. is expected to become a subsidiary of NatWest Markets Plc in 2019, subject to regulatory approval.

NatWest Markets Plc legal entity

There is a distinction between the disclosure of the NatWest Markets operating segment performance in the RBS Group's 2018 Annual Report and Accounts (ARA) and the NatWest Markets Plc entity disclosure in this document.

- NatWest Markets Plc entity includes the Central items & other segment but excludes NatWest Markets N.V.
- The RBS Group's 2018 Annual Report and Accounts reports the NatWest Markets segment, including NatWest Markets N.V. but excludes the Central items & other segment.

Financial review

Presentation of information

On 30 April 2018 following the completion of the first Ring-Fencing Transfer Scheme (RFTS) the entity formerly known as The Royal Bank of Scotland plc was renamed NatWest Markets Plc. NatWest Markets Plc (the 'Bank' or 'NWM Plc') is a wholly-owned subsidiary of The Royal Bank of Scotland Group plc (the 'holding company' or 'RBSG'). The 'Group' comprises NWM Plc and its subsidiary and associated undertakings. 'RBS Group' comprises the holding company and its subsidiary and associated undertakings.

The Bank publishes its financial statements in pounds sterling ('£' or 'sterling'). The abbreviations '£m' and '£bn' represent millions and thousands of millions of pounds sterling, respectively, and references to 'pence' represent pence in the United Kingdom ('UK'). Reference to 'dollars' or '\$' are to United States of America ('US') dollars. The abbreviations '\$m' and '\$bn' represent millions and thousands of millions of dollars, respectively, and references to 'cents' represent cents in the US. The abbreviation '€' represents the 'euro', and the abbreviations '€m' and '€bn' represent millions and thousands of millions of euros, respectively.

RBS Group ring-fencing activities in 2018:

- NatWest Group Holdings Corporation (NWGH) which wholly owns NatWest Markets Securities Inc. (NWMSI) was transferred to NWM Plc effective 1 March 2018. NWGH was previously a direct subsidiary of National Westminster Bank Plc (NatWest).
- As part of NWM Plc's capital reduction undertaken during the year, NatWest Holdings transferred to RBSG with effect from 2 July 2018 thereby creating the legal separation of those RBS Group entities that will be within the ring-fenced sub-group from those held outside the ring-fence.
- In Q3 2018, a second RFTS was completed which involved the transfer of certain markets products, including interest rate and foreign exchange derivatives, from NatWest to the Group.
- In Q4 2018, NatWest Markets established its own liquidity portfolio outside of the ring-fenced bank. The liquidity portfolio was £17.2 billion at 31 December 2018. On 1 November 2018, NatWest Markets ceased to form part of the UK Domestic Liquidity SubGroup (UK DoLSUB).

Performance overview

The Group's performance during the year includes the NatWest Market segment, the Central items & other segment and discontinued operations. The NatWest Markets segment in NWM Plc is a subset of the NatWest Market segment disclosed within the RBS Group 2018 ARA which also includes NatWest Markets N.V. plus other adjustments. The Central items & other segment within NWM plc is also a subset of the Central items & other segment within the RBS Group. Discontinued Operations includes the retail, commercial banking and RBS Treasury activities, predominantly relating to NatWest Holdings, transferred out of the Group in preparation for ring-fencing.

The Group reported an attributable profit of £1,217 million for 2018 compared with a loss of £44 million in 2017. This represents an increase of £1,261 million which largely reflects profit from discontinued operations, which increased by £1,269 million to £2,461 million in 2018 from £1,192 million in 2017. The loss before tax from continuing operations decreased to £1,277 million from £1,396 million in 2017, as lower strategic costs and reductions in other expenses in core and legacy were offset by a modest reduction in total income.

Income, costs and legacy issues:

- Income was down by £53 million in 2018, reflecting net interest expenses of £267 million, a reduction of £315 million compared with 2017, offset by non-interest income which increased by £262 million to £1,125 million in 2018.
- Operating expenses, excluding litigation and conduct costs, were down £383 million to £1,268 million in 2018, reflecting lower

strategic costs and reductions in other operating expenses in core and legacy.

- Reached civil settlement with the US Department of Justice (DoJ) in relation to the DoJ's investigation into RBS's issuance and underwriting of US Residential Mortgage Backed Securities (RMBS) between 2005 and 2007, resulting in a £1,040 million additional provision in Q2 2018. In addition, a £241 million release relating to a RMBS litigation indemnity was recognised in Q2 2018. Total litigation and conduct costs were £969 million (2017 - £735 million).

Balance sheet, capital and risk-weighted assets (RWAs):

- Group total assets and liabilities decreased by £478.3 billion and £452.2 billion to £247.9 billion and £238.8 billion respectively at 31 December 2018, compared with 31 December 2017. These movements primarily reflect the transfer of assets and liabilities to subsidiaries of NatWest Holdings in preparation for ring-fencing.
- Group funded assets, excluding disposal groups, increased by £10.5 billion to £113.5 billion primarily reflecting £16.9 billion of cash and high quality securities held as part of the establishment of the liquidity portfolio. This was offset by a reduction in trading assets.
- During 2018, NWM Plc issued £4.8 billion senior unsecured debt securities in line with its funding target.
- In Q4 2018, NWM Plc issued £0.7 billion internal AT1 and £5.1 billion internal MREL compliant senior debt to RBSG plc. This was partially offset by redemptions of £1.8 billion of legacy internal Tier 1 instruments and £2.1 billion of legacy internal Tier 2 instruments held by RBSG.
- On 31 October 2018, NWM Plc paid a dividend of £2.3 billion to the parent company RBSG, pursuant to a planned capital reduction. A further dividend of £250 million was paid on 28 December 2018.
- Bank RWAs decreased by £96.0 billion to £40.8 billion at 31 December 2018 from £136.8 billion at 31 December 2017, primarily related to the reduction in credit risk RWAs following the ring-fencing transfers. Leverage exposure reduced to £148.5 billion compared with £390.1 billion at 31 December 2017.
- The Bank Common Equity Tier 1 (CET1) ratio increased by 90 basis points to 15.6% at 31 December 2018, from 14.7% at 31 December 2017. The CET1 ratio at year end 2018 reflects the RWA reduction as well as the lower equity base following the capital reduction and dividends paid during the year. The Bank CRR leverage ratio decreased to 5.0% at 31 December 2018 (2017 - 5.6%).
- Total regulatory capital and CRR-compliant MREL for the Bank at 31 December 2018 was £13.9 billion, or 34% of RWAs.

Continuing to simplify and de-risk the business:

- The Group continued to reflect progress in winding down its legacy positions, which consist predominantly of the residual exposures inherited from Capital Resolution when that segment ceased after Q3 2017.
- Legacy funded assets have reduced to £4.1 billion (2017 - £11.1 billion) and legacy RWAs to £6.4 billion (2017 - £10.0 billion).
- Net non-investment grade exposures (banking book credit risk and counterparty credit risk for traded products), were £1.8 billion at 31 December 2018 of which £1.3 billion relate to legacy assets.
- IFRS 9 Stage 3 exposures were £0.7 billion and Stage 3 expected credit loss (ECL) £0.1 billion at 31 December 2018, all of which relate to legacy assets.

Financial review

Performance overview continued

	2018			2017			Variance	
	NatWest Markets £m	Central items & other £m	Total £m	NatWest Markets £m	Central items & other £m	Total £m	£m	Total %
Income statement								
Net interest income	5	(272)	(267)	215	(167)	48	(315)	nm
Non-interest income	1,013	112	1,125	825	38	863	262	30
Total income	1,018	(160)	858	1,040	(129)	911	(53)	(6)
Strategic costs	(178)	(30)	(208)	(305)	—	(305)	97	(32)
Litigation and conduct costs	(142)	(827)	(969)	(208)	(527)	(735)	(234)	32
Other operating expenses	(1,075)	15	(1,060)	(1,352)	6	(1,346)	286	(21)
Operating expenses	(1,395)	(842)	(2,237)	(1,865)	(521)	(2,386)	149	(6)
Operating loss before impairments	(377)	(1,002)	(1,379)	(825)	(650)	(1,475)	96	(7)
Impairment releases	88	14	102	79	—	79	23	29
Operating loss before tax	(289)	(988)	(1,277)	(746)	(650)	(1,396)	119	(9)
Tax credit			33			160	(127)	(79)
Loss from continuing operations			(1,244)			(1,236)	(8)	1
Profit from discontinued operations, net of tax			2,461			1,192	1,269	106
Profit/(loss) for the period			1,217			(44)	1,261	nm
Income								
Rates	579	—	579	975	—	975	(396)	(41)
Currencies	430	—	430	484	—	484	(54)	(11)
Financing	375	—	375	383	—	383	(8)	(2)
Revenue share paid to discontinued businesses	(171)	—	(171)	(101)	—	(101)	(70)	69
Core income excluding OCA	1,213	—	1,213	1,741	—	1,741	(528)	(30)
Legacy	(287)	—	(287)	(643)	—	(643)	356	(55)
Own credit adjustments (OCA)	92	—	92	(70)	—	(70)	162	(231)
Other	—	(160)	(160)	12	(129)	(117)	(43)	37
Total income	1,018	(160)	858	1,040	(129)	911	(53)	(6)

The operating loss before tax was £1,277 million compared with a loss of £1,396 million in 2017, largely reflecting reduced operating expenses which more than offset the impact of lower income during 2018.

Income

Net interest expenses were £267 million compared with income of £48 million in 2017, mainly as a result of higher interest expense relating to debt issuance and subordinated liabilities, the latter of which was reflected within discontinued operations in the prior year.

Non-interest income increased by £262 million to £1,125 million compared with £863 million in 2017. This was primarily driven by lower income from trading activities in core due to challenging fixed income, currencies and commodities (FICC) market conditions in Q4 2018, together with turbulence in European bond markets earlier in the year. Losses within legacy were lower compared with the prior year, offsetting the impact of reduced trading income in core. Additionally, own credit gains of £92 million in 2018 compared with a loss of £70 million in 2017. Other operating losses were £48 million, as indemnity recoveries of £140 million and a gain on redemption of own debt (£101 million) in the year were offset by reserves recycling and disposal losses. Other operating income was £119 million in 2017 which included certain non-repeat gains.

Operating expenses

Operating expenses of £2,237 million were £149 million lower than in 2017 principally due to lower strategic costs and reductions in other operating expenses in both core and legacy. This was partially offset by increased litigation and conduct costs, which were £969 million compared with £735 million in 2017 and primarily related to the civil settlement with the DoJ in relation to RMBS matters.

Impairments

Impairment releases were £102 million compared with a release of £79 million in 2017. The releases resulted from an increase in expected recoveries on defaulted positions in IFRS 9 Stage 3 and other credit improvements.

Discontinued operations

The profit from discontinued operations was £2,461 million in 2018 compared with £1,192 million in the prior year and included the results of the businesses within the ring-fenced bank up until the point of transfer of NatWest Holdings to RBSG, the impact of significant recycling of foreign currency (including an element relating to the prior year), cashflow and other reserves associated with the transfer of ring-fenced banking activity, as well as the continued run down of Central items in the latter part of the year in preparation for ICB compliance. For further details refer to Note 21.

NatWest Markets segment

Operating loss before tax was £289 million compared with a loss of £746 million in 2017, mainly due to lower strategic costs and reductions in other operating expenses in core and legacy. Total income, which includes own credit adjustments, declined by £22 million to £1,018 million in 2018 as core income reduced due to challenging FICC market conditions in Q4 2018 and turbulence in European bond markets earlier in 2018. This was offset by lower losses in legacy relative to 2017.

Central items & other segment

Operating loss before tax was £988 million in 2018 compared with £650 million in the prior year. Income was impacted by increased net interest expense on debt securities and subordinated liabilities which were reflected in Central items until Q3 2018. Included within non-interest income of £112 million in 2018 was the gain on redemption of own debt as well as indemnity recoveries offset by the impact of reserves recycling and disposal losses. Operating expenses increased £321 million to £842 million reflecting the civil settlement with the DoJ.

Financial review

Performance overview continued

Performance key metrics and ratios (1)	2018	2017
Liquidity coverage ratio (LCR) (%) (2)	457	<i>nm</i>
Liquidity portfolio (£bn)	17.2	185.5
Stressed coverage ratio (%) (2)	208	<i>nm</i>
Total wholesale funding (£bn) (3)	19.8	13.0
Total funding including repo (£bn)	80.0	68.6
Common Equity Tier (CET 1) ratio (%)	15.6	14.7
CRR leverage ratio (%)	5.0	5.6
Risk-weighted assets (RWAs) (£bn)	40.8	136.8
Total Capital ratio (%)	21.5	18.7
Total MREL ratio (%)	34.0	<i>nm</i>

Notes:

- (1) Capital resources and RWAs are based on the PRA transitional arrangements for the Bank. Regulatory capital is monitored and reported at legal entity level for significant subsidiaries of the RBS Group. Leverage is based on the CRR end-point minimum requirement.
- (2) These metrics have been presented for the NatWest Markets solo legal entity for 2018 as managed internally, based on the establishment of the liquidity portfolio during 2018 and the legal entity having ceased to be a member of the UK Domestic Liquidity SubGroup (UK DoLSub) on 1 November 2018. Prior year comparatives, relating to the period in which the former RBS plc was a member of the UK DoLSub, are not meaningful (nm).
- (3) Excluding derivative collateral and intra-RBS Group balances. 2017 relates to continuing operations only.

By 2020 NWM Plc is targeting capital and balance sheet metrics as follows:

Metric (1)	Estimate
CET1 ratio	c.15%
MREL ratio (2)	At least 30%
Leverage ratio	At least 4%
RWAs	c. £35 billion

Notes:

- (1) All metrics presented relate to NatWest Markets Plc solo legal entity.
- (2) Includes total regulatory capital plus downstreamed internal MREL.

NWM Plc intends to meet the regulatory requirements in respect of the liquidity coverage ratio (LCR) and of the net stable funding ratio (NSFR) as it is introduced over time.

Simplifying and de-risking

The table below presents a summary of the Group's balance sheet exposures as at the year ended 31 December 2018. The legacy positions consist predominantly of the residual exposures which were reported within Capital Resolution until its closure after Q3 2017. These exposures are primarily derivatives or loan agreements that are either being sold or run down over time.

	2018	
	Total £bn	of which: Legacy £bn
RWAs	40.8	6.4
Total net credit exposures (banking book and counterparty credit)	39.3	5.9
of which: net non-investment grade credit exposures	1.8	1.1
of which: IFRS 9 Stage 3 exposures	0.7	0.7
and: IFRS 9 Stage 3 expected credit loss (ECL)	0.1	0.1

Financial review

Performance overview continued

The table below presents a segmental analysis of key balance sheet asset lines for the Group.

	31 December 2018			31 December 2017			Variance	
	NatWest Markets £bn	Central items & other £bn	Total £bn	NatWest Markets £bn	Central items & other £bn	Total £bn	Total £bn	%
Balance sheet								
Funded assets	111.1	2.4	113.5	103.1	(0.1)	103.0	10.5	10%
of which: Core	107.0	2.4	109.4	92.0	(0.1)	91.9	17.5	19%
of which: Legacy	4.1	—	4.1	11.1	—	11.1	(7.0)	(63%)
Derivative assets	133.9	0.4	134.3	159.3	—	159.3	(25.0)	(16%)
Total assets (excluding disposal groups)	245.0	2.8	247.8	262.4	(0.1)	262.3	(14.5)	(6%)
Assets of disposal groups	0.1	—	0.1	—	463.9	463.9	(463.8)	(100%)
Total assets	245.1	2.8	247.9	262.4	463.8	726.2	(478.3)	(66%)

Total assets decreased by £478.3 billion to £247.9 billion at 31 December 2018, compared with £726.2 billion at 31 December 2017. Total liabilities decreased by £452.2 billion to £238.8 billion at 31 December 2018. These movements largely reflected the ring-fencing transfers undertaken during the year, which included the transfer of business to subsidiaries of NatWest Holdings during H1 2018, and the subsequent capital reduction whereby ownership of NatWest Holdings transferred to RBSG plc with effect from 2 July 2018.

Derivative assets and derivative liabilities were down £25.0 billion, 16%, to £134.3 billion and £23.4 billion, 15%, to £129.9 billion respectively. The movements in mark-to-market were driven by an upward shift in interest rate yields (including sterling and US dollar) as well as the strengthening US dollar relative to other major currencies such as the euro and sterling.

Cash and balances at central banks increased to £11.2 billion, resulting from the establishment of the liquidity portfolio in NWM Plc during 2018. Trading assets, which primarily includes securities and reverse repurchase agreements relating to client-led activity, as well as derivative collateral, were down £11.0 billion to £75.0 billion as the business continued to manage leverage exposure in line with becoming a non-ring fenced bank. Trading liabilities, which largely comprise short positions, repurchase agreements and derivative collateral decreased by £9.7 billion to £72.3 billion at 31 December 2018.

Balance sheet profile as at 31 December 2018

The Group balance sheet profile is summarised as follows:

Assets	£bn	£bn	Liabilities
Cash and balances at central banks	11.2		
Trading assets	75.0	72.3	Trading liabilities
Securities	30.0	23.8	Short positions
Reverse repos (1)	24.8	25.6	Repos (2)
Derivative collateral (3)	18.9	20.1	Derivative collateral (4)
Other trading assets	1.3	2.8	Other trading liabilities
Loans - amortised cost	9.0	5.3	Deposits - amortised cost
Settlement balances	2.7	2.9	Settlement balances
Amounts due from holding company and fellow subsidiaries	3.4	10.2	Amounts due to holding company and fellow subsidiaries
Other financial assets	11.3	16.3	Other financial liabilities
Other assets	1.0	1.9	Other liabilities
Funded assets	113.6	108.9	Liabilities excluding derivatives
Derivative assets	134.3	129.9	Derivative liabilities
Total assets	247.9	238.8	Total liabilities
		19.8	of which: wholesale funding(5)
		9.0	of which: short-term wholesale funding(5)
Net derivative assets	3.9	3.3	Net derivative liabilities

Notes:

- (1) Comprises bank reverse repos of £8.0 billion (2017 - £11.8 billion) and customer reverse repos of £16.8 billion (2017 - £24.4 billion).
- (2) Comprises bank repos of £5.0 billion (2017 - £4.0 billion) and customer repos of £20.6 billion (2017 - £24.4 billion).
- (3) Comprises derivative collateral relating to banks of £7.3 billion (2017 - £6.8 billion) and customers of £11.6 billion (2017 - £14.7 billion).
- (4) Comprises derivative collateral relating to banks of £11.0 billion (2017 - £12.4 billion) and customers of £9.1 billion (2017 - £10.3 billion).
- (5) Excludes derivative collateral and intra-RBS Group balances, including resolution-eligible instruments and subordinated liabilities issued to RBSG plc.
- (6) Based on the current legal entity structure of the Group as at 31 December 2018, which excludes NatWest Markets N.V.

Board of directors and secretary

Approval of Strategic Report

The Strategic Report for the year ended 31 December 2018 set out on pages 1 to 48 was approved by the Board of directors on 14 February 2019.

By order of the Board.

Scott Gibson
Company Secretary
14 February 2019

Chairman
Frank Dangeard

Executive directors
Chris Marks
Richard Place

Non-executive directors
Vivek Ahuja
Brendan Nelson
Sarah Wilkinson

Board and committees

Chairman
Frank Dangeard (appointed 16 May 2016)
[Chairman of the Nominations Committee](#)
[Chairman of the Board Risk Committee \(to 21 January 2019\)](#)
[Chairman of the Remuneration Committee](#)

Executive directors
Chris Marks (appointed 30 April 2018)
[Chief Executive Officer](#)

Richard Place (appointed 30 April 2018)
[Chief Financial Officer](#)

Independent non-executive directors
Vivek Ahuja (appointed 30 April 2018)
[Chairman of Board Risk Committee \(from 21 January 2019\)](#)

Brendan Nelson (appointed 01 April 2010)
[Chairman of Audit Committee](#)

Sarah Wilkinson (appointed 30 April 2018)

Preparation for ring-fencing

During 2018 in preparation for ring-fencing a number of changes were made to the composition of the NatWest Markets Board of directors and secretary to align the membership with NatWest Markets Plc. At the same time as the new directors and secretary were appointed the previous members resigned as follows:

The following executive directors resigned on 30 April 2018:

Ross McEwan
Ewen Stevenson

The following independent non-executive directors resigned on 30 April 2018:

Alison Davies	Baroness Noakes
Morten Friis	Mike Rogers
Penny Hughes	Mark Seligman
Yasmin Jetha	Lena Wilson
Robert Gillespie	Howard Davies

Auditors

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Stamford
CT 06901 USA

NatWest Markets Plc

(formerly The Royal Bank of Scotland plc)
Registered in Scotland No. SC90312

Top and emerging risks

NatWest Markets has a continuous process for managing its top and emerging risks. These are risks of the highest concern, which require senior management focus.

Type	Risk	Mitigation
Financial resilience	The Group may not meet its financial and operational targets, including in respect of respect of cost: income ratios, cost reductions or generating sustainable returns. The implementation of the UK ring-fencing regime has had a significant impact on the Group and entails increased risks. The Group's operational footprint has reduced and a number of key elements of its business proposition have changed – including its balance sheet composition and new funding requirements for which it is reliant on access to the global capital markets and its assigned credit rating. Political uncertainties and macroeconomic and market volatility could adversely affect the availability of funding for the Group resulting in a reduction in the Group's liquidity position and increase the cost of funding such that the Group may not generate sustainable returns and constitute a viable banking business. The Group may not meet the prudential regulatory requirements for capital and liquidity, or manage its capital, liquidity or funding effectively which could trigger certain management actions or recovery options. The Group's current capital strategy is based on the planned reduction of its RWAs through disposals, natural attrition and other capital management initiatives. It may also be adversely affected if the RBS Group fails to meet the requirements of regulatory stress tests or if certain analytical risk models are found to be inadequate. The Group's target markets are highly competitive, which poses challenges in terms of achieving some strategic objectives. Moreover, changes in technology, customer behaviour and business models in these markets have accelerated. The Group faces market risk arising from its activity as a market maker and through the facilitation of client trades. The Group has significant exposure to counterparty and borrower risk. There is a risk that, as new technologies develop the Group's business model is disrupted or that it fails to keep pace with evolving client needs.	The Group is focused on meeting its strategic cost ambitions in a sustainable and controlled way. The Group has established new sources of external funding independent of its parent in 2018 and continues to evaluate potential funding sources to meet its senior funding requirement of £3-5 billion in 2019. It issued £4.8 billion in senior debt securities. The Group receives capital and funding from its parent and upstreams MREL securities to meet regulatory requirements. The Group currently holds adequate regulatory capital and CRR-compliant MREL which, as at 31 December 2018, totalled 34% of RWAs. The Group monitors the competitive environment and associated regulatory, technological and strategic developments and makes adjustments as appropriate. During 2018 Natwest Markets plc reduced its RWAs by £96 billion and now targets RWAs of approximately £35 billion in 2020. The RBS Group achieved a clear pass in the 2018 stress tests and is operating within capital appetite. The Group has a comprehensive set of market risk limits, monitored independently of the trading desks, to ensure that risk-taking remains with the appetite set by the Board. The Group uses industry-standard documentation, enabling netting and collateralisation.
Operational and IT resilience	The Group relies on complex information technology systems, making recovery from failure challenging. The Group's information technology systems are critical to the services it provides, with any outages experienced in the banking sector widely publicised. Cyber attacks continue to evolve in frequency, sophistication and severity. There is a risk that a cyber attack damages the Group's ability to do business and/or compromises data security. There is a risk that the Group lacks sufficient capability or capacity to deliver, or adapt to, change. There is a risk that establishing the Group as a non-ring-fenced entity will lead to heightened operational risk, particularly against a backdrop of political and economic uncertainty. There is a risk that the actions of a third-party supplier could negatively affect the Group's reputation or profitability. A breach in data privacy, either within the Group or in a third-party organisation, may lead to negative impacts. There is a risk that the Group's data strategy is not adequate for the evolving landscape.	A major investment programme has improved systems resilience across the RBS Group. As the RBS Group continues to simplify and modernise infrastructure and applications, system sustainability has improved. A major security programme across the RBS Group has delivered control enhancements to mitigate the risk of cyber attack. The Group continues to invest in its defences. The Group monitors people risk closely and has plans in place to support retention of key roles, with wider programmes supporting engagement and training. The Group continues to implement change in line with its project plans while assessing the implementation risks and mitigating where possible. The Group continues to maintain a strong focus on its control environment at all stages of the customer journey, including its approach to data management. Relationships with third-party suppliers are subject to a number of controls and guidelines outlined in the appropriate policy within the RBS Policy Framework.

Top and emerging risks

Economic and political	There is the chance of greater volatility in markets as a result of uncertainty in the economic and political environment. Scenarios that could have a potentially material negative effect on the Group include the impact of the UK's exit from the European Union; a second Scottish independence referendum; a UK recession (including significant falls in house prices); global financial volatility linked to advanced economy interest rate increases or decreases, a protracted period of low interest rates in the UK, vulnerabilities in emerging market economies resulting in contagion in the Group's core markets, a Eurozone crisis or major geopolitical instability. Accelerating climate change may lead to faster-than-anticipated climate-related impacts on the Group and the wider economy.	The Group uses a range of complementary approaches to inform strategic planning and risk mitigation relating to a range of economic and political risks. These include robust risk assessment and dynamic portfolio management in accordance with the risk appetite framework, the setting of prudent lending criteria and, for specific market risks, structural hedging. Stress testing and scenario planning is also used extensively. The Group is working to embed climate risk into the risk framework, and adapting its operation and business strategy to both the risks of climate change and the transition to a low carbon economy.
Legal regulatory and conduct risk	The Group expects government and regulatory intervention in the financial services industry to remain high for the foreseeable future, and also subject to increasing regulation in new areas such as financial risks relating to climate change and artificial intelligence. The Group's subject to the requirements of the UK ring-fencing regime and is required to ensure operational continuity in resolution. The steps required to ensure such compliance entail significant costs, and also impose significant operational, legal and execution risk that could continue to affect its business model. The UK's legal framework may change if the government takes steps to replace laws based on EU legislation, including banking regulation, following the exit from the European Union. This may affect contracts and other obligations. The impacts of past business conduct resulting in future litigation and conduct charges could be substantial. The Group is involved in a number of investigations and in litigation, including: investigations into foreign exchange trading, and continuing LIBOR and other rates-related and litigation settlements may result in additional financial penalties, non-monetary penalties or other consequences, which may be material. The transition from LIBOR and other IBOR rates to alternative risk-free rates may lead to heightened legal, business and conduct risks.	The Group considers and incorporates the implications of proposed or potential regulatory activities in its strategic and financial plans. An enhanced compliance and conduct risk framework has been developed, setting minimum standards for the management of conduct risks across the RBS Group. The Group continues to consider all potential outcomes in planning related to the UK's exit from the European Union. A programme to determine the scale and scope of the impacts relating to the transition to alternative risk free rates is underway. Activity to manage the transition will take place within the Group's control framework and in line with expected standards of conduct.

Capital and risk management

	Page
Presentation of Information	10
Risk management framework	
Introduction	10
Risk culture	11
Risk governance	12
Risk appetite	13
Risk controls and limits	13
Risk identification and measurement	13
Risk treatment and mitigation	14
Risk assurance	14
Model risk	14
Stress testing	14
Capital, liquidity and funding risk	
Definition and sources	17
Key developments	17
Capital, liquidity and funding risk management	18
Minimum requirements	19
Measurements	19
Credit risk	
Definition, sources and key developments	23
Risk governance, appetite and controls	23
Risk identification, measurement and models	23
Risk mitigation	23
Risk assessment and monitoring	23
Trading activities	29
Banking activities	32
Key IFRS 9 terms and differences	37
Market risk	
Traded market risk	40
Non-traded market risk	42
Pension risk	45
Compliance & conduct risk	45
Financial crime	46
Operational risk	46
Business risk	47
Reputational risk	48

Presentation of information

Where indicated in the section headers, information in the Capital and risk management section (pages 10 to 48) is within the scope of the Independent auditor's report. Where a main section header, presented in bold, is marked as audited all sub sections are also audited. Unless otherwise indicated, disclosures in this section include disposal groups in relevant exposures and measures. Capital and risk management are generally conducted on an overall basis within RBS Group such that common policies, procedures, frameworks and models apply across the RBS Group. Therefore, for the most part, discussion on these qualitative aspects reflects those in the RBS Group as relevant for the businesses and operations in the Group.

Risk management framework

Introduction

NatWest Markets operates under RBS Group's integrated risk management framework, centred around the embedding of a strong risk culture, which is designed to achieve compliance with prudential and conduct obligations. Each element of the risk management framework functions both individually and as part of a larger continuum. The framework ensures the tools and capability are in place to facilitate risk management and decision-making across the organisation.

The RBS Group's strategy is informed and shaped by an understanding of the risk landscape, including a range of significant risks and uncertainties in the external economic, political and regulatory environment. Identifying these risks and understanding how they affect the RBS Group, informs risk appetite and risk management practice.

Risk appetite, which is supported by a robust set of principles, policies and practices, defines our levels of tolerance for a variety of risks.

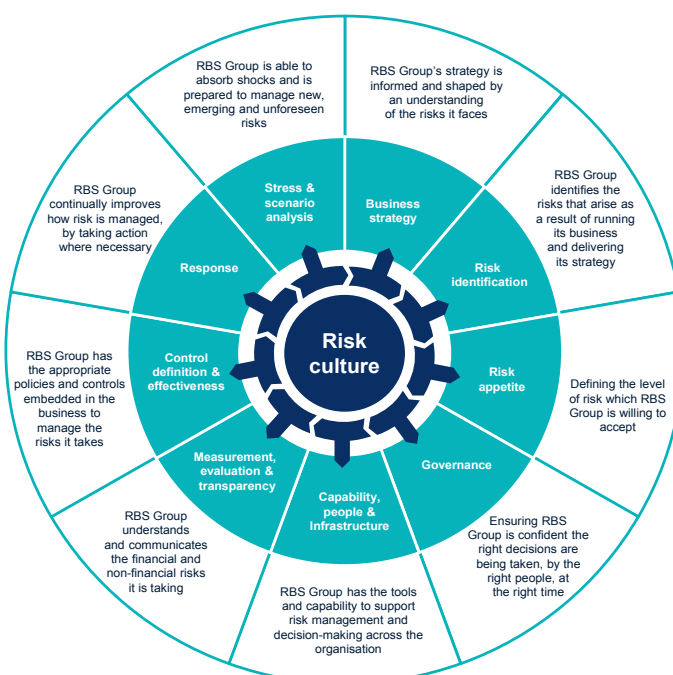
It is a key element of the RBS Group's risk management framework and culture, providing a structured approach to risk-taking within agreed boundaries.

Effective governance, underpinned by the three lines of defence model, is essential to ensure the right decisions are being made by the right people at the right time. Governance includes regular and transparent risk reporting as well as discussion and decision-making at senior management committees, which informs management strategies across the organisation.

The RBS Group aims to have the right tools in place to support effective risk management. Having the appropriate capability, people and infrastructure is central. This is supported by a strong emphasis on systems, training and development to ensure threats are anticipated and managed appropriately within the boundaries determined by the agreed risk appetite.

Measurement, evaluation and transparency are also fundamental elements of the framework, providing robust analysis of the materiality and likelihood of specific threats as well as supporting understanding and communication of the financial and non-financial risks to which the RBS Group is exposed.

The RBS Group has a strong focus on defining the control environment to ensure the effective operation of policies and processes embedded in the customer-facing businesses, thus facilitating the management of the risks they take in the course of their day-to-day activities.



The RBS Group also has a strong focus on continually improving the way risk is managed, particularly in terms of how threats are anticipated or responded to, but also in terms of simplifying or enhancing existing controls, policies and practice.

Essential to this is the ability to scan both the medium and long-term horizon for risks. Stress testing is used to quantify, evaluate and understand the potential impact that changes to risks may have on the financial strength of the RBS Group, including its capital position. In turn, the results of stress tests can be used to inform and shape strategy.

Capital and risk management

Risk management framework [continued](#)

All RBS Group employees share ownership of the way risk is managed. The businesses, the control and support functions, and Internal Audit work together to make sure business activities and policies are consistent with risk appetite; following the three lines of defence model. The RBS Group constantly monitors its risk profile against its defined risk appetite and limits, taking action when required to balance risk and return.

The methodology for setting, governing and embedding risk appetite across the RBS Group is being further enhanced with the aim of simplifying current risk appetite processes and increasing alignment with strategic planning and external threat assessments.

Risk culture

A strong risk culture is essential if the Group is to achieve its ambition to build a truly customer-focused bank. The Group has adopted RBS Group's risk culture target to make risk simply part of the way that employees work and think.

Such a culture must be built on strong risk practices and appropriate risk behaviours must be embedded throughout the organisation.

To achieve this, the Group is focusing on leaders as role models and taking action to build clarity, continuing to develop capability and motivate employees to reach the required standards of risk culture behaviour. This includes: taking personal responsibility for understanding and proactively managing the risks associated with individual roles; respecting risk management and the part it plays in daily work; understanding clearly the risks associated with individual roles; aligning decision-making to the Group's risk appetite; considering risk in all actions and decisions; escalating risks and issues early; taking action to mitigate risks; learning from mistakes and near-misses; challenging others' attitudes, ideas and actions; and reporting and communicating risks transparently.

The target risk culture behaviours are embedded in Our Standards and are clearly aligned to the core values of "serving customers", "working together", "doing the right thing" and "thinking long term". These act as an effective basis for a strong risk culture because Our Standards are used for performance management, recruitment and development.

A risk culture measurement and reporting approach has been developed, enabling the RBS Group to benchmark both internally and externally. This allows the RBS Group to assess progress in embedding its target risk culture where risk is simply part of the way staff work and think.

Training

Enabling employees to have the capabilities and confidence to manage risk is core to the RBS Group's learning strategy.

The RBS Group offers a wide range of risk learning, both technical and behavioural, across the risk disciplines. This training can be mandatory, role-specific or for personal development.

Code of Conduct

Aligned to the RBS Group's values is the Code of Conduct. The code provides guidance on expected behaviour and sets out the standards of conduct that support the values. It explains the effect of decisions that are taken and describes the principles that must be followed.

These principles cover conduct-related issues as well as wider business activities. They focus on desired outcomes, with practical guidelines to align the values with commercial strategy and actions. The embedding of these principles facilitates sound decision-making and a clear focus on good customer outcomes.

A simple decision-making guide – the "YES check" – has been included in the Code of Conduct. It is a simple set of five questions, designed to ensure the RBS Group values guide day-to-day decisions:

- Does what I am doing keep our customers and the RBS Group safe and secure?
- Would customers and colleagues say I am acting with integrity?
- Am I happy with how this would be perceived on the outside?
- Is what I am doing meeting the standards of conduct required?
- In five years' time would others see this as a good way to work?

Each of the five questions is a prompt to think about how the situation fits with the RBS Group's values. It ensures that employees can think through decisions that do not have a clear answer, and guides their judgements.

If conduct falls short of the RBS Group's required standards, the accountability review process is used to assess how this should be reflected in pay outcomes for those individuals concerned. RBS Group-wide remuneration policy ensures that the remuneration arrangements for all employees reflect the principles and standards prescribed by the PRA rulebook and the FCA handbook. Any employee falling short of the expected standards would also be subject to internal disciplinary policies and procedures. If appropriate, the relevant authority would be notified.

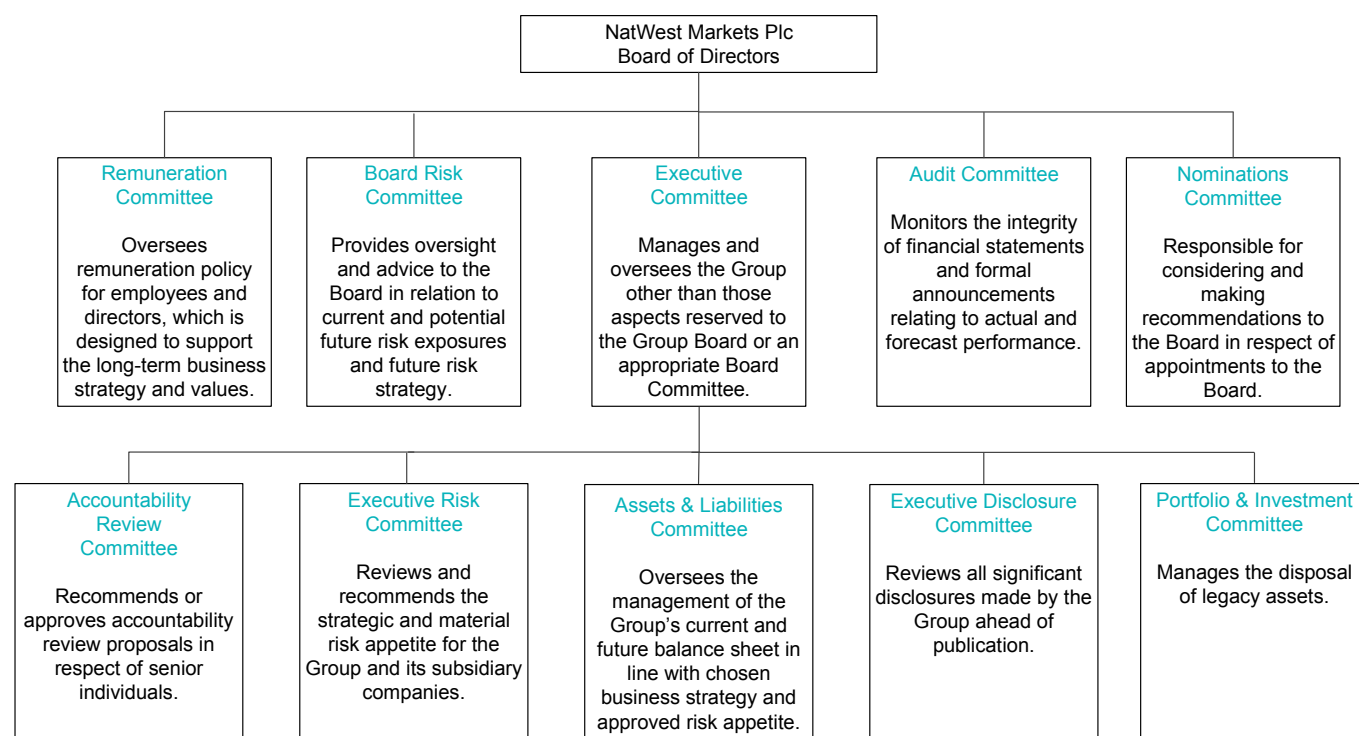
Capital and risk management

Risk management framework [continued](#)

Risk governance

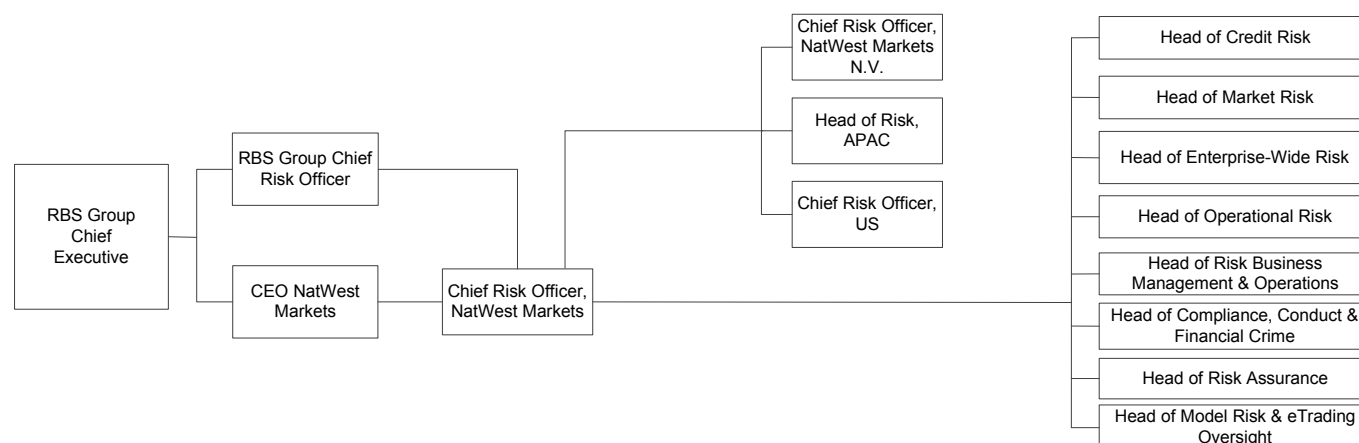
Committee structure

The diagram illustrates the Group's risk committee structure in 2018 and the main purposes of each committee.



Risk management structure

The diagram illustrates the Group's risk management structure in 2018 and key risk management responsibilities.



Notes:

- (1) NatWest Markets Plc is a wholly-owned subsidiary of The Royal Bank of Scotland Group plc (RBS Group).
- (2) The NatWest Markets Chief Risk Officer reports directly to both the NatWest Markets CEO and the RBS Group Chief Risk Officer, and has an additional reporting line to the chair of the NatWest Markets Board Risk Committee, and a right of access to the committee.
- (3) The NatWest Markets Risk function is independent of the NatWest Markets customer facing franchises and support functions. It provides oversight of risk management ensuring that risk exposures arising from management and business activities are adequately monitored and controlled. The heads of Credit Risk, Market Risk; Enterprise-Wide Risk; Operational Risk; Risk Business Management & Operations; Compliance, Conduct & Financial Crime; Risk Assurance; and Model Risk & eTrading Oversight report to the NatWest Markets Chief Risk Officer. The heads of risk work closely with the NatWest Markets NV Chief Risk Officer, the US Chief Risk Officer and the APAC Head of Risk to ensure consistency across its international businesses.
- (4) The NatWest Holdings Risk function provides risk management services across the RBS Group, including – where agreed – to the NatWest Markets Chief Risk Officer. These services are managed, as appropriate, through service level agreements.

Capital and risk management

Risk management framework continued

Three lines of defence

NatWest Markets has adopted the RBS Group's three lines of defence model to articulate accountabilities and responsibilities for managing risk across the organisation. The three lines of defence model is adopted across the industry to support the embedding of effective risk management and is expressed through a set of principles as outlined below. All roles, regardless of level, sit within one of these three lines.

First line of defence – Management and supervision

The first line of defence encompasses most roles within the Group, including those in customer franchise, Technology and Services as well as some support functions such as Human Resources, Communications & Marketing and Finance. Responsibilities include:

- Owning, managing and supervising, within a defined risk appetite, the risks which exist in business areas and support functions.
- Ensuring the business has effective mechanisms for identifying, reporting and managing risk and controls.
- Ensuring appropriate controls are in place to mitigate risk, balancing control, customer service and competitive advantage.
- Ensuring that the culture of the business supports balanced risk decisions and compliance with policy, laws and regulations.

Second line of defence – Oversight and control

The second line of defence is the Risk function as well as the policy and control elements of Human Resources, Legal and the Finance function. Responsibilities include:

- Leading the articulation, design and development of risk culture and appetite.
- Setting the standard for risk management across the Group.
- Overseeing and challenging the management of risks and controls.
- Analysing the aggregate risk profile and ensuring that risks are being managed within risk appetite.
- Providing expert advice to the first line on risk management, including the application of effective risk and control frameworks and the consideration of risk in decision-making.
- Providing senior executives with relevant management information and reports, and escalating concerns where appropriate.
- Providing senior executives with quality assurance and controls testing required by policy and regulations, supporting management assertions around the robustness of the risk framework.

Third line of defence – Internal Audit

Responsibilities include:

- Providing assurance to the Group Audit Committee on the appropriateness of the design and operational effectiveness of governance, risk management and internal controls to monitor and mitigate material risks.
- Engaging with management to provide perspectives, insights and challenge in order to influence the building of a sustainable bank.
- Providing independent assurance to the Financial Conduct Authority, Prudential Regulation Authority, Central Bank of Ireland and other key jurisdictional regulators on specific risks and controls.

Risk appetite

Risk appetite defines the level and types of risk the Group is willing to accept, within risk capacity, in order to achieve strategic objectives and business plans. It links the goals and priorities to risk management in a way that guides and empowers staff to serve customers well and achieve financial targets.

For certain strategic risks, risk capacity defines the maximum level of risk the Group can assume before breaching constraints determined by regulatory capital and liquidity needs, the operational environment, and from a conduct perspective. Articulating risk capacity helps determine where risk appetite should be set, ensuring there is a buffer between internal risk appetite and the Group's ultimate capacity to absorb losses.

Risk appetite framework

The risk appetite framework bolsters effective risk management by promoting sound risk-taking through a structured approach, within agreed boundaries. It also ensures emerging risks and risk-taking activities that would be out of appetite are identified, assessed, escalated and addressed in a timely manner.

To facilitate this, a detailed annual review of the framework is carried out. The review includes:

- Assessing the adequacy of the framework when compared to internal and external expectations.
- Ensuring the framework remains effective as a strong control environment for risk appetite.
- Assessing the level of embedding of risk appetite across the organisation.

The RBS Group Board approves the risk appetite framework annually.

Establishing risk appetite

In line with RBS Group's risk appetite framework, risk appetite is communicated across the Group through risk appetite statements. The risk appetite statements provide clarity on the scale and type of activities that can be undertaken in a manner that is easily conveyed to staff.

Risk appetite statements consist of qualitative statements of appetite supported by risk limits and triggers that operate as a defence against excessive risk-taking. They are established at RBS Group-wide level for all strategic risks and material risks, and at legal entity, franchise, and function level for all other risks.

The annual process of establishing risk appetite statements is completed alongside the business and financial planning process. This ensures plans and risk appetite are appropriately aligned.

The Group Board sets risk appetite for the most material risks to help ensure the Group is well placed to meet its priorities and long-term targets even under challenging economic environments. It is the basis on which the Group remains safe and sound while implementing its strategic business objectives.

In addition to following the RBS Group risk appetite, the Group sets risk appetite limits for its own most material risks. The Group's risk profile is frequently reviewed and monitored to ensure it remains within appetite and that management focus is concentrated on all strategic risks, material risks and emerging risk issues. Risk profile relative to risk appetite is reported regularly to the Group Board and senior management.

Risk controls and limits

Risk controls and their associated limits are an integral part of the risk appetite approach and a key part of embedding risk appetite in day-to-day risk management decisions. A clear tolerance for material risk types is set in alignment with business activities.

The Group policies directly support the qualitative aspects of risk appetite. They ensure that appropriate controls are set and monitored.

Risk identification and measurement

Risk identification and measurement within the risk management process comprise:

- Regular assessment of the overall risk profile, incorporating market developments and trends, as well as external and internal factors.
- Monitoring of the risks associated with lending and credit exposures.
- Assessment of trading and non-trading portfolios.
- Review of potential risks in new business activities and processes.
- Analysis of potential risks in any complex and unusual business transactions.

The financial and non-financial risks that RBS Group faces each day are detailed in the Risk Directory. This provides a common risk language to ensure consistent terminology is used by the Group and the rest of the RBS Group. The Risk Directory is subject to annual review.

Capital and risk management

Risk management framework [continued](#)

This ensures that it continues to provide a comprehensive and meaningful list of the inherent risks within the businesses.

Risk treatment and mitigation

Risk treatment and mitigation is an important aspect of ensuring that risk profile remains within risk appetite. Risk mitigation strategies are discussed and agreed with the businesses.

When evaluating possible strategies, costs and benefits, residual risks (risks that are retained) and secondary risks (those caused by the risk mitigation actions) are considered. Monitoring and review processes are in place to track results. Early identification and effective management of changes in legislation and regulation are critical to the successful mitigation of conduct risk. The effects of all changes are managed to ensure timely compliance readiness. Changes assessed as having a high or medium-high impact are managed closely. Significant and emerging risks that may affect future results and performance are reviewed and monitored. Action is taken to mitigate potential risks as and when required. In-depth analysis is carried out, including the stress testing of exposures relative to the risk.

Risk assurance

Assurance is carried out on targeted credit risk, market risk, compliance and conduct risk and financial crime risk activities to provide assurance to both internal and external stakeholders including the Board, senior management, Internal Audit and the Group's regulators. Selected key controls are also reviewed.

Qualitative reviews are carried out to assess various risk aspects as appropriate, including: the quality of risk portfolios, the accuracy of the Basel model inputs and related probability of default/loss given default classifications, the quality of risk management practices, policy compliance and adherence to risk appetite. This can include testing the Group's credit portfolios and market risk exposures to assist in the early identification of emerging risks, as well as undertaking targeted reviews to examine specific issues.

The adequacy and effectiveness of selected key controls owned and operated by the second line of defence are also tested (with a particular focus on credit risk, market risk controls and surveillance controls). Selected controls supporting risk data aggregation and reporting are also reviewed.

Assurance is carried out on Anti-Money Laundering, Sanctions, and Anti-Bribery & Corruption processes and controls. This helps inform whether or not the financial crime control environment is adequate and effective and whether financial crime risk is appropriately identified, managed and mitigated. Assurance is also carried out on the Conduct risk framework including the review of compliance to conduct policies.

The Risk Assurance Committee ensures a consistent and fair approach to all aspects of the second-line assurance review activities. The committee also monitors and validates the ongoing programme of reviews and tracks the remediation of the more material review actions.

Model risk

Model risk is the risk that a model is specified incorrectly (not achieving the objective for which it is designed), implemented incorrectly (an error in translating the model specification into the version actually used), or being used incorrectly (correctly specified but applied inappropriately).

RBS Group uses a variety of models as part of its risk management process and activities. Key examples include the use of pricing models for valuation of positions and other models to support risk assessments in the credit approval process, ongoing credit risk management, monitoring and reporting, as well as the calculation of risk-weighted assets. Other examples include the use of models to measure market risk exposures and calculate associated capital requirements. The models used for stress-testing purposes also play a key role in ensuring the Group holds sufficient capital, even in stressed market scenarios.

Key developments in 2018

In April 2018, the PRA set out its expectations on the model risk management practices that should be adopted when using stress test models. The RBS Group has a strong focus on model risk management and, as a result, practices were reviewed and, where appropriate, work to enhance them in line with regulatory expectations continues. The RBS Group further invested in model risk management during 2018, particularly given business demand and the growing complexity of requirements, such as new regulation and AI. This included the specification of additional IT systems to enhance capability in this area.

Model Risk Governance

Model Risk Governance is responsible for setting policy and providing a governance framework for all of the RBS Group's models and related processes. It is also responsible for defining and monitoring model risk appetite in conjunction with model owners and model users, monitoring the model risk profile and reporting on the model population as well as escalating issues to senior management, through the Model Risk Forum, and the respective franchise and function risk committees.

Model Risk Management

Model Risk Management performs independent model validation. It works with individual businesses and functions to monitor adherence to model risk standards, ensuring that models are developed and implemented appropriately and that their operational environment is fit for purpose. Model Risk Management performs reviews of relevant risk and pricing models in two instances: (i) for new models or amendments to existing models and (ii) as part of its ongoing programme to assess the suitability of these models.

Model Risk Management reviews may test and challenge the logic and conceptual soundness of the methodology, or the assumptions underlying a model. Reviews may also test whether or not all appropriate risks have been sufficiently captured as well as checking the accuracy and robustness of calculations. Based on the review and findings from Model Risk Management, the Group's model or risk committees consider whether a model can be approved for use. Models used for regulatory reporting may additionally require regulatory approval before implementation.

Model Risk Management reassesses the appropriateness of approved risk models on a periodic basis. Each periodic review begins with an initial assessment. Based on the initial assessment, an internal model governance committee will decide to re-ratify a model or to carry out additional work. In the initial assessment, Model Risk Management assesses factors such as a change in the size or composition of the portfolio, market changes, the performance of – or any amendments to – the model and the status of any outstanding issues or scheduled activities carried over from previous reviews.

Stress testing

Stress testing – risk management

Stress testing is a key risk management tool and a fundamental component of the Group's approach to risk and capital management. It is used to quantify, evaluate and understand the potential impact of specified changes to risk factors on the financial strength of the Group, including its capital position. Stress testing includes:

- Scenario testing, which examines the impact of a hypothetical future state to define changes in risk factors.
- Sensitivity testing, which examines the impact of an incremental change to one or more risk factors.

Capital and risk management

Risk management framework continued

The process for stress testing consists of four broad stages:

Define scenarios	- Identify the specific vulnerabilities and risks of legal entities in the Group. - Define and calibrate scenarios to examine risks and vulnerabilities. - Formal governance process to agree scenarios.
Assess impact	- Translate scenarios into risk drivers. - Assess impact to positions, income and costs. - Impact assessment captures input from across the Group.
Calculate results and assess implications	- Aggregate impacts into overall results. - Results form part of risk management process. - Scenario results are used to inform the Group's business and capital plans.
Develop and agree management actions	- Scenario results are analysed by subject matter experts and appropriate management actions are then developed. - Scenario results and management actions are reviewed and agreed by senior management through executive committees including Executive Risk Committee, Board Risk Committee and the Board.

Stress testing is used widely across the Group. The diagram below summarises key areas of focus:



Specific areas that involve capital management include:

- Strategic financial and capital planning** – through assessing the impact of sensitivities and scenarios on the capital plan and capital ratios.
- Risk appetite** – through gaining a better understanding of the drivers of – and the underlying risks associated with – risk appetite.
- Risk identification** – through a better understanding of the risks that could potentially impact the Group's financial strength and capital position.
- Risk mitigation** – through identifying actions that can be taken to mitigate risks, or could be taken, in the event of adverse changes to the business or economic environment. Risk mitigation is substantially supplemented through the Group's recovery plan.

Reverse stress testing is also carried out. This examines circumstances that can lead to specific, defined outcomes such as business failure. Reverse stress testing allows the Group to examine potential vulnerabilities in its business model more fully.

Capital sufficiency – going concern forward-looking view

Going concern capital requirements are examined on a forward-looking basis – including as part of the annual budgeting process – by assessing the resilience of capital adequacy and leverage ratios under hypothetical future states. A range of future states are examined. In particular, capital requirements are assessed:

- Based on a forecast of future business performance given expectations of economic and market conditions over the forecast period.
- Based on a forecast of future business performance under adverse economic and market conditions over the forecast period. A range of scenarios of different severity may be examined.

The examination of capital requirements under normal economic and market conditions enables the Group to demonstrate how its projected business performance allows it to meet all internal and regulatory capital requirements as they arise over the plan horizon. The cost of issuance will be factored into business performance metrics.

The examination of capital requirements under adverse economic and market conditions is assessed through stress testing.

The results of stress tests are not only used widely across the Group but also by the regulators to set specific capital buffers. The Group takes part in a number of stress tests run by regulatory authorities to test industry-wide vulnerabilities under crystallising global and domestic systemic risks.

Internal assessment of capital adequacy

An internal assessment of material risks is carried out annually to enable an evaluation of the amount, type and distribution of capital required to cover these risks. This is referred to as the Internal Capital Adequacy Assessment Process (ICAAP). The ICAAP consists of a point-in-time assessment of NWM Plc's exposures and risks at the end of the financial year together with a forward-looking stress capital assessment. The ICAAP is approved by the Group Board and submitted to the PRA.

The ICAAP is used to form a view of capital adequacy separately to the minimum regulatory requirements. The ICAAP is used by the PRA to make an assessment of NWM Plc's specific capital requirements through the Pillar 2 framework.

Capital allocation

The RBS Group has mechanisms to allocate capital across its legal entities and businesses (including the NatWest Markets Group) which aim to optimise the utilisation of capital resources taking into account applicable regulatory requirements, strategic and business objectives and risk appetite.

The framework for allocating capital is approved by the RBS Group Asset & Liability Management Committee.

Governance

Capital management is subject to substantial review and governance. Formal approval of RBS Group-wide capital management policies is either by the Asset & Liability Management Committee or by the Board on the recommendation of the Board Risk Committee. The Board approves the capital plans, including those for key legal entities and businesses as well as the results of the stress tests relating to those capital plans.

Stress testing – liquidity

Liquidity risk monitoring and contingency planning

In implementing the liquidity risk management framework, a suite of tools is used to monitor, limit and stress test the risks on the balance sheet. Limit frameworks are in place to control the level of liquidity risk, asset and liability mismatches and funding concentrations.

Capital and risk management

Risk management framework continued

Liquidity risks are reviewed at significant legal entity and business levels daily, with performance reported to the Asset & Liability Management

Committee at least monthly. Liquidity Condition Indicators are monitored daily which ensures any build-up of stress is detected early and the response escalated appropriately through recovery planning.

Internal assessment of liquidity

Under the liquidity risk management framework, the Group undertakes the Individual Liquidity Adequacy Assessment Process. This includes assessment of net stressed liquidity outflows. The Group considers a range of extreme but plausible stress scenarios on its liquidity position over various time horizons, as outlined below.

Type	Description
Idiosyncratic scenario	The market perceives the Group to be suffering from a severe stress event, which results in an immediate assumption of increased credit risk or concerns over solvency.
Market-wide scenario	A market stress event affecting all participants in a market through contagion, counterparty failure and other market risks. The Group is affected under this scenario but no more severely than any other participants with equivalent exposure.
Combined scenario	This scenario models the combined impact of an idiosyncratic and market stress occurring at once. The combined scenario reflects the contingency that a severe name-specific event occurs at the Group in conjunction with a broader market stress, causing wider damage to the market and financial sector and severely affecting funding markets and assets.

The Group uses the most severe combination of these to set the internal stress testing scenario. The results of this enable the Group to set its internal liquidity risk appetite, which complements the regulatory liquidity coverage ratio requirement.

Stress testing – recovery and resolution planning

The Group maintains a recovery plan that sets out credible recovery options that could be implemented in the event of a severe stress to restore its business to a stable and sustainable condition, focusing on addressing the capital and liquidity position of the Group and its constituent legal entities.

The recovery plan sets out a range of triggers that activate the implementation of the recovery plan and sets out the operational plan for implementation of appropriate recovery options.

The recovery plan is a key component of risk management including the framework for managing liquidity, funding and capital.

The recovery plan is prepared and updated annually and approved by the Board. Following Board approval it is also submitted to the PRA each year. The recovery plan is assessed for appropriateness on an ongoing basis, and is maintained in line with regulatory requirements.

Resolution would be implemented if the Group was assessed by the UK authorities to have failed and the appropriate regulator placed the Group into resolution. The process of resolution is owned and implemented by the Bank of England (as UK Resolution Authority).

The Group is working with UK and global regulators to ensure that it is compliant with the principles of resolution planning. This includes, but is not limited to, establishing appropriate loss-absorbing capacity and ability to maintain operational continuity in resolution. Reflecting the degree of change required to ensure the Group is resolvable, a multi-year programme in place to develop resolution capability and meet regulatory requirements.

Stress testing – market risk

Traded market risk

The Group undertakes daily market risk stress testing to identify vulnerabilities and potential losses in excess of, or not captured in, value-at-risk. The calculated stresses measure the impact of changes in risk factors on the fair values of the trading portfolios.

The Group conducts macroeconomic and vulnerability-based stress testing.

Macroeconomic stress tests are carried out periodically as part of the bank-wide, cross-risk capital planning process. The scenario narratives are translated into risk factor shocks using historical market data and insights by economists, risk managers and the first line.

Market risk stress results are combined with those for other risks into the capital plan presented to the Board. The cross-risk capital planning process is conducted once a year, with a planning horizon of five years. The scenario narratives cover both regulatory scenarios and macroeconomic scenarios identified by the Group.

Vulnerability-based stress testing begins with the analysis of a portfolio and expresses its key vulnerabilities in terms of plausible, vulnerability scenarios under which the portfolio would suffer material losses. These scenarios can be historical, macroeconomic or forward-looking/hypothetical. Vulnerability-based stress testing is used for internal management information and is not subject to limits. However, the results for relevant scenarios are reported to senior management.

Non-traded market risk

Non-traded exposures are reported to the PRA on a quarterly basis as part of the Stress Testing Data Framework. The return provides the regulator with an overview of the Group's banking book interest rate exposure, providing detailed product information analysed by interest rate driver and other characteristics – including accounting classification, currency and counterparty type.

Scenario analysis based on hypothetical adverse scenarios is performed on non-traded exposures as part of the industry-wide Bank of England and European Banking Authority stress exercises. In addition, the Group produces its own internal scenario analysis as part of the financial planning cycles.

Market risk exposures in the non-trading book which are not included in Pillar 1 are capitalised through the ICAAP. The process covers the following risk types: gap risk, basis risk, credit spread risk, structural foreign exchange risk and accounting volatility risk. The ICAAP is completed with a combination of value and earnings measures. The total non-traded market risk capital requirement is determined by adding the different charges for each sub risk type. The ICAAP methodology captures at least ten years of historical volatility, produced with 99% confidence level. Methodologies are reviewed by Model Risk and the results are approved by the Group Board.

Capital and risk management

Capital, liquidity and funding risk

Definitions

Capital consists of reserves and instruments issued that are available, have a degree of permanency and are capable of absorbing losses. A number of strict conditions set by regulators must be satisfied to be eligible as capital.

Capital adequacy risk is the risk that there is or will be insufficient capital and loss absorbing debt instruments to operate effectively including meeting minimum regulatory requirements, operating within Board approved Group risk appetite and supporting strategic goals.

Liquidity consists of assets that can be readily converted to cash within a short timeframe and with a reliable value. Liquidity risk is the risk of being unable to meet financial obligations as and when they fall due.

Funding consists of on-balance sheet liabilities that are used to provide cash to finance assets. Funding risk is the risk of not maintaining a diversified, stable and cost-effective funding base.

Liquidity and funding risks arise in a number of ways, including through the maturity transformation role that banks perform. The risks are dependent on factors such as:

- Maturity profile;
- Composition of sources and uses of funding;
- The quality and size of the liquidity portfolio;
- Wholesale market conditions; and
- Depositor and investor behaviour.

Sources

Capital

The eligibility of instruments and financial resources as regulatory capital is laid down by applicable regulation. Capital is categorised by applicable regulation under two tiers (Tier 1 and Tier 2) according to the ability to absorb losses on either a going or gone concern basis, degree of permanency and the ranking of loss absorption. There are three broad categories of capital across these two tiers:

- **CET1 capital** - CET1 capital must be perpetual and capable of unrestricted and immediate use to cover risks or losses as soon as these occur. This includes ordinary shares issued and retained earnings.
- **Additional Tier 1 (AT1) capital** - This is the second type of loss absorbing capital and must be capable of absorbing losses on a going concern basis. These instruments are either written down or converted into CET1 capital when a pre-specified CET1 ratio is reached.
- **Tier 2 capital** - Tier 2 capital is the bank entities' supplementary capital and provides loss absorption on a gone concern basis. Tier 2 capital absorbs losses after Tier 1 capital. It typically consists of subordinated debt securities with a minimum initial maturity of five years.

Minimum requirement for own funds and eligible liabilities (MREL)

In addition to capital, other specific loss absorbing instruments, including senior notes issued by the Group, may be used to cover certain gone concern capital requirements. In the EU, this is referred to as MREL. Gone concern refers to the situation in which resources must be available to enable an orderly resolution, in the event that the Bank of England (BoE) deems that the Group has failed.

Liquidity

The Group maintains a prudent approach to the definition of liquidity resources. Liquidity resources are divided into primary and secondary liquidity as follows:

- Primary liquid assets include cash and balances at central banks, Treasury bills and other high quality government and US agency bonds.
- Secondary liquid assets are eligible as collateral for local central bank liquidity facilities. These assets may include lower quality bonds and eligible loans that are retained on balance sheet and pre-positioned with a central bank so that they may be converted into additional sources of liquidity at very short notice.

Funding

The Group's primary funding sources are as follows:

Type	Description
Wholesale markets	Includes: • Short-term (less than 1 year) unsecured money market funding; • Commercial paper and certificates of deposit; • Secured repo market funding.
Term debt	Includes: • Issuance of long-term (more than 1 year) senior unsecured and secured debt securities. • Issuance of long-term subordinated liabilities.
Internal capital and MREL	Includes: • Equity, AT1, Tier 2 capital instruments and MREL issued to RBS Group plc.

Managing capital requirements: regulated entities

In line with paragraph 135 of IAS 1 'Presentation of Financial Statements', the Group manages capital having regard to regulatory requirements. Regulatory capital is monitored and reported on an individual regulated bank legal entity basis ('bank entity'), which is the CRR transitional basis as relevant in the jurisdiction for significant subsidiaries of the RBS Group.

Liquidity metrics including the LCR and Stressed Outflow Coverage are presented for the solo legal entity (the Bank) in line with how it is regulated by the PRA. Funding sources and Notes issued disclosures are presented for the Group rather than for NatWest Markets Plc.

Key developments in 2018

- On 31 October 2018, NWM Plc paid a dividend of £2.3 billion to the parent company RBSG, pursuant to a planned capital reduction. A further dividend of £250 million was paid on 28 December 2018.
- The Bank CET1 ratio increased by 90 basis points to 15.6% at 31 December 2018, from 14.7% at 31 December 2017. The CET1 ratio at year end 2018 reflects the RWA reduction as well as the lower equity base following the capital reduction and dividends paid during the year.
- Bank RWAs decreased by £96.0 billion to £40.8 billion at 31 December 2018 from £136.8 billion at 31 December 2017, primarily related to the reduction in credit risk RWAs following the ring-fencing transfers.
- Leverage exposure reduced to £148.5 billion compared with £390.1 billion at 31 December 2017. The Bank leverage ratio on a CRR basis, using PRA transitional capital, decreased to 5.0% following reductions in Tier 1 capital and leverage exposure.

Capital and risk management

Capital, liquidity and funding risk *continued*

- During Q4 2018, the Group established its own liquidity portfolio outside of the ring-fenced bank. The liquidity portfolio was £17.2 billion at 31 December 2018. On 1 November 2018, NWM Plc ceased to form part of the UK DoLSUB.
- The Bank LCR was 457% at year end 2018. The prior year metric, relating to the period when NWM Plc formed part of the UK DoLSUB prior to the ring-fencing reorganisation, is not meaningful.
- During 2018, NWM Plc issued £4.8 billion senior unsecured debt securities in line with its funding target.
- In Q4 2018, NWM Plc issued £0.7 billion internal AT1 and £5.1 billion internal MREL compliant senior debt to RBSG plc. This was partially offset by redemptions of £1.8 billion legacy internal Tier 1 instruments and £2.1 billion internal Tier 2 instruments issued to RBSG.
- Total Bank regulatory capital and CRR-compliant MREL at 31 December 2018 was £13.9 billion, or 34% of RWAs.
- As a pre-requisite for ring-fencing, from 1 November 2018 the Bank has left the RBS Group Capital Support Deed (CSD) and is now party to a new CSD comprising non ring-fenced bank UK entities. The new CSD has limited significance to NWM Plc as it is the only member bank and the other entities have modest capitalisations.

Capital management

Capital management is the process by which the bank entities ensure that they have sufficient capital and other loss absorbing instruments to operate effectively. This includes meeting minimum regulatory requirements, operating within Board approved risk appetite, maintaining credit ratings and supporting strategic goals. Capital management is critical in supporting the bank entities' businesses and is also considered at the Group level. It is enacted through an RBS Group-wide end to end framework.

Capital planning is integrated into the RBS Group's wider annual budgeting process and is assessed and updated monthly. As a key operating entity, capital plans are produced and managed for the bank. This is summarised below. Other elements of capital management, including risk appetite and stress testing, are set out on pages 13 and 14.

Produce capital plans	• Capital plans are produced for the RBS Group, its key operating entities and its businesses over a five year planning horizon under expected and stress conditions. Stressed capital plans are produced to support internal stress testing through the ICAAP or for regulatory purposes. • Shorter term forecasts are developed frequently in response to actual performance, changes in internal and external business environment and to manage risks and opportunities.
Assess capital adequacy	• Capital plans are developed to maintain capital of sufficient quantity and quality to support the Group's business and strategic plans over the planning horizon within approved risk appetite, as determined via stress testing, and minimum regulatory requirements. • Capital resources and capital requirements are assessed across a defined planning horizon. • Impact assessment captures input from across the Group including from businesses.
Inform capital actions	• Capital planning informs potential capital actions including managing capital through buy backs, redemptions or through new issuance or via internal transactions. • Decisions on capital actions will be influenced by strategic and regulatory requirements, the cost and prevailing market conditions. • As part of capital planning, the Group will monitor its portfolio of capital securities and assess the optimal blend.

Capital planning is one of the tools that the Group uses to monitor and manage capital risk on a going and gone concern basis, including the risk of excessive leverage.

Liquidity and funding management

Liquidity and funding management follows a similar process to that outlined above for capital.

Liquidity portfolio management

The size of the portfolio is determined by referencing the Group's liquidity risk appetite. The Group, consistent with that of the RBS Group, retains a prudent approach to setting the composition of the liquidity portfolio, which is subject to internal policies and limits over quality of counterparty, maturity mix and currency mix. The Group categorises its liquidity portfolio, including its locally managed liquidity portfolios, into primary and secondary liquid assets. The majority of the portfolio is managed by NatWest Markets Treasury, for which the NatWest Markets Treasurer is responsible.

NatWest Markets Securities Inc., a significant operating subsidiary of NWM Plc, holds a locally managed portfolio to comply with local regulations that may differ from PRA rules.

The liquidity value of the portfolio is determined by taking current market prices and applying a discount or haircut, to give a liquidity value that represents the amount of cash that can be generated by the asset.

Ring-fencing implications

As a result of the legal entity restructuring in response to the UK government's ring-fencing legislation, NatWest Markets Plc ceased to be a member of the UK DoLSUB on 1 November 2018. Prior to this date, NatWest Markets Plc's share of the UK DoLSUB liquidity portfolio was managed centrally by RBS Treasury.

Funding risk management

The Group manages funding risk through a comprehensive framework which measures and monitors the funding risk on the balance sheet.

The long term obligations of the Group must be met with diverse and stable funding sources, the behavioural maturity of these liabilities must at a minimum equal those of the assets.

Capital and risk management

Capital, liquidity and funding risk *continued*

Minimum requirements

Capital adequacy ratios

The Bank entities are subject to minimum capital requirements relative to RWAs. The table below summarises the CRR-end point minimum requirements of capital to RWAs that the UK bank entities are expected to meet.

Type	CET1	Total Tier 1	Total capital
Minimum capital requirements	4.5%	6.0%	8.0%
Capital conservation buffer	2.5%	2.5%	2.5%
Countercyclical capital buffer ⁽¹⁾	0.5%	0.5%	0.5%
Total ⁽²⁾	7.5%	9.0%	11.0%

Notes:

- (1) The institution specific countercyclical capital buffer requirement is based on the weighted average of geographical exposures. The Financial Policy Committee (FPC) sets the UK countercyclical capital buffer, which is currently 1.0% (effective from November 2018). The rate had previously increased from 0.0% to 0.5% (effective June 2018). Foreign exposures may be subject to different countercyclical capital buffer rates dependent on the rate set in those jurisdictions.
- (2) The minimum requirements do not include any capital that the bank entities may be required to hold as a result of the Pillar 2 assessment.

Leverage ratio

In November 2016, the European Commission published a proposal for the adoption of a legally binding 3% of Tier 1 capital minimum leverage ratio as part of the CRR 2 package of legislation. There remains uncertainty regarding the timing of the implementation of CRR 2 proposals and at present there is no binding minimum ratio of capital to leverage exposure that applies to individual bank entities as regulated by the PRA in the UK.

Measurement

Capital, RWAs and leverage

The table below sets out the key Capital and Leverage ratios

	2018 £m	2017 £m
Capital ⁽¹⁾		
CET1	6,369	20,169
Tier 1	7,352	21,966
Total	8,757	25,600

RWAs

Credit risk	9,234	94,259
Counterparty credit risk	13,285	13,691
Market risk	14,106	15,809
Operational risk	4,152	13,052
Total RWAs	40,777	136,811

Capital adequacy ratios

	%	%
CET1	15.6	14.7
Tier 1	18.0	16.1
Total	21.5	18.7

Leverage

Tier 1 capital (£m)	7,352	21,966
CRR leverage exposure (£m)	148,502	390,055
CRR leverage ratio (%)	5.0	5.6

Note:

- (1) CRR as implemented by the PRA in the UK, with effect from 1 January 2014.

From 1 January 2015, UK Banks have been required to meet at least 56% of their Pillar 2A capital requirement with CET1 capital and the balance with Additional Tier 1 and/or Tier 2 capital. The Pillar 2A capital requirement is the additional capital that the Bank must hold, in addition to meeting its Pillar 1 requirements in order to comply with the PRA's overall financial adequacy rule.

Capital and risk management

Capital, liquidity and funding risk continued

Capital resources (audited)

Under Capital Requirements Regulation (CRR), regulators within the European Union monitor capital on a legal entity basis, with local transitional arrangements on the phasing in of end-point CRR. The capital resources based on the PRA transitional basis for the Bank are set out below.

	2018	2017
	£m	£m
Shareholders' equity (excluding non-controlling interests)		
Shareholders' equity	8,922	44,522
Other equity instruments	(749)	—
	8,173	44,522
Regulatory adjustments and deductions		
Own credit	(223)	10
Defined benefit pension fund adjustment	(197)	(196)
Cash flow hedging reserve	(114)	49
Deferred tax assets	—	(50)
Prudential valuation adjustments	(450)	(471)
Expected losses less impairments	(351)	(579)
Instruments of financial sector entities where the institution has a significant and non-significant investment	(445)	—
Significant investments in excess of secondary capital	—	(22,539)
Other regulatory adjustments	(24)	(577)
	(1,804)	(24,353)
CET1 capital	6,369	20,169
Additional Tier 1 (AT1) capital		
Qualifying instruments and related share premium	749	—
Qualifying instruments and related share premium subject to phase out	234	1,877
	983	1,877
Tier 1 deductions		
Instruments of financial sector entities where the institution has a significant investment	—	(80)
	—	(80)
Tier 1 capital	7,352	21,966
Qualifying Tier 2 capital		
Qualifying instruments and related share premium	2,098	4,353
Tier 2 deductions		
Instruments of financial sector entities where the institution has a significant and non-significant investment	(693)	(719)
	(693)	(719)
Tier 2 capital	1,405	3,634
Total regulatory capital	8,757	25,600

Note:

- (1) CRR as implemented by the Prudential Regulation Authority in the UK, with effect from 1 January 2014. All regulatory adjustments and deductions to CET1 have been applied in full, other than significant investments capital deduction and grandfathered capital instruments subject to phase out, to which transitional arrangements have been applied.

Capital and risk management

Capital, liquidity and funding risk continued

Leverage exposure

The leverage exposure is based on the CRR Delegated Act.

	2018 £m	2017 £m
Leverage		
Cash and balances at central banks	11,095	61,625
Trading assets	61,990	73,011
Derivatives	134,291	164,179
Net loans to customers	16,588	131,917
Other assets	18,077	95,157
Total assets	242,041	525,889
Derivatives		
- netting	(140,796)	(164,101)
- potential future exposures	41,663	51,654
Securities financing transactions gross up	1,800	2,958
Undrawn commitments	7,306	33,714
Regulatory deductions and other adjustments	(1,557)	(24,372)
Exclusion of core UK-group exposures	(1,955)	(35,687)
Leverage exposure	148,502	390,055

Liquidity portfolio (audited)

The table below shows the liquidity portfolio by product, liquidity value and carrying value. Liquidity value is lower than carrying value as it is stated after discounts (or haircuts) applied to security instruments. NatWest Markets Plc ceased to be part of the UK DoLSUB in November 2018 and has separately established its own liquidity portfolio during 2018. At year end 2017, liquidity held by the former RBS plc Group formed part of RBS Treasury's centrally managed UK DoLSUB portfolio comprising five licenced deposit-taking UK banks. Accordingly, liquidity portfolio balances were reflected in disposal groups for accounting purposes at year end 2017.

	2018 £m	2017 £m
Cash and balances at central banks	11,005	93,598
Central and local government bonds		
AAA rated governments	615	3,411
AA- to AA+ rated governments and US agencies	5,256	25,972
Primary liquidity	16,876	122,981
Secondary liquidity (1)	344	62,555
Total liquidity value	17,220	185,536
Total carrying value	17,388	209,039

The table below shows the liquidity value of the liquidity portfolio by currency.

	GBP £m	USD £m	EUR £m	Other £m	Total £m
Total liquidity portfolio					
2018	3,832	2,950	8,881	1,557	17,220
2017	138,985	11,416	33,664	1,471	185,536

Note:

(1) Comprises assets eligible for discounting at the Bank of England and other central banks.

Capital and risk management

Capital, liquidity and funding risk continued

Funding sources (audited)

The table below shows the Group's carrying values of the principal funding sources based on contractual maturity. Balance sheet captions include balances held at all classifications under IFRS 9/IAS 39.

	2018					2017				
	Short term less than 1 year £m	Long term more than 1 year £m	Total Third Party subsidiaries (1) £m	Amounts due to holding company and fellow £m	Total £m	Short term less than 1 year £m	Long term more than 1 year £m	Total Third Party subsidiaries (1) £m	Amounts due to holding company and fellow £m	Total £m
By product										
Bank deposits										
Derivative cash collateral	11,005	—	11,005	—	11,005	12,394	—	12,394	—	12,394
Other deposits (2)	2,587	6	2,593	2,542	5,135	577	14	591	79	670
	13,592	6	13,598	2,542	16,140	12,971	14	12,985	79	13,064
Debt securities in issue										
Certificates of deposit (CDs)	1,006	—	1,006	—	1,006	2,378	—	2,378	—	2,378
Commercial paper	1,820	—	1,820	—	1,820	—	—	—	—	—
Medium-term notes (MTNs)	3,598	10,099	13,697	—	13,697	2,200	7,784	9,984	—	9,984
	6,424	10,099	16,523	—	16,523	4,578	7,784	12,362	—	12,362
Subordinated liabilities	—	658	658	1,962	2,620	—	—	—	—	—
Notes issued	6,424	10,757	17,181	1,962	19,143	4,578	7,784	12,362	—	12,362
Wholesale funding	20,016	10,763	30,779	4,504	35,283	17,549	7,798	25,347	79	25,426
Customer deposits										
Derivative cash collateral	9,124	—	9,124	—	9,124	10,279	—	10,279	—	10,279
Other deposits (3) (4)	3,627	471	4,098	5,398	9,496	3,572	913	4,485	6	4,491
Total customer deposits	12,751	471	13,222	5,398	18,620	13,851	913	14,764	6	14,770
Total funding excluding repos	32,767	11,234	44,001	9,902	53,903	31,400	8,711	40,111	85	40,196
Total repos										
Central and other banks	5,421	—	5,421	—	5,421	4,029	—	4,029	—	4,029
Other financial institutions	20,083	—	20,083	—	20,083	21,813	—	21,813	—	21,813
Other corporate	565	—	565	—	565	2,520	—	2,520	—	2,520
	26,069	—	26,069	—	26,069	28,362	—	28,362	—	28,362
Total disposal groups	—	—	—	—	—	343,192	29,859	373,051	49,425	422,476
Total funding	58,836	11,234	70,070	9,902	79,972	402,954	38,570	441,524	49,510	491,034
Of which: available in resolution										
(5) (6)	—	658	658	7,084	7,742	—	2,120	2,120	5,723	7,843

Notes:

- (1) Amounts due to holding company and fellow subsidiaries which relate to non-financial instruments of £259 million (2017 - £5 million) have been excluded from the table.
- (2) Includes £268 million (2017 - £64 million) of HFT deposits included in trading liabilities on the balance sheet.
- (3) Includes £1,518 million (2017 - £1,227 million) of HFT deposits included in trading liabilities on the balance sheet.
- (4) Total Bank regulatory capital and CRR-compliant MREL at 31 December 2018 was £13.9 billion. Of the £5,398 million internal customer deposits, the CRR-compliant MREL component totalled £5,125 million and was executed in the form of a loan from RBSG plc.
- (5) Eligible liabilities (as defined in the Banking Act 2009 as amended from time to time) that meet the eligibility criteria set out in the regulations, rules, policies, guidelines, or statements of the Bank of England including the Statement of Policy published by the Bank of England in June 2018. All available in resolution instruments for 2018, including external subordinated liabilities, subordinated liabilities and senior internal MREL issued to RBSG plc, have a final contractual maturity of greater than one year.
- (6) Available in resolution instruments for the year ended 31 December 2017, comprising external subordinated liabilities and internal subordinated liabilities issued to RBSG plc, were reflected within disposal groups.

Notes issued - residual maturity profile by note type

The table below shows the Group's debt securities in issue and subordinated liabilities by residual maturity.

	Debt securities in issue					Subordinated liabilities £m	Total notes in issue £m	Total notes in issue %
	Commercial paper and CDs £m	MTNs £m	Covered bonds £m	Securitisations £m	Total £m			
2018								
Less than 1 year	2,826	3,598	—	—	6,424	—	6,424	34
1-3 years	—	6,768	—	—	6,768	98	6,866	36
3-5 years	—	2,025	—	—	2,025	425	2,450	13
More than 5 years	—	1,306	—	—	1,306	135	1,441	7
Subtotal	2,826	13,697	—	—	16,523	658	17,181	90
Amounts due to holding company and fellow subsidiaries	—	—	—	—	—	1,962	1,962	10
Total	2,826	13,697	—	—	16,523	2,620	19,143	100
2017								
Less than 1 year	2,378	2,200	—	—	4,578	—	4,578	15
1-3 years	—	5,286	—	—	5,286	—	5,286	17
3-5 years	—	1,084	—	—	1,084	—	1,084	3
More than 5 years	—	1,414	—	—	1,414	—	1,414	5
Subtotal	2,378	9,984	—	—	12,362	—	12,362	40
Disposal groups	2,259	—	6,308	396	8,963	9,753	18,716	60
Total	4,637	9,984	6,308	396	21,325	9,753	31,078	100

Capital and risk management

Credit risk

Definition

Credit risk is the risk that customers fail to meet their contractual obligation to settle outstanding amounts.

The following disclosures in this section are audited:

- Forbearance.
- Impairment, provisioning and write-offs.
- Transition from IAS 39 to IFRS 9.
- Key elements of IFRS 9 impairment provisions
 - Economic loss drivers (excluding economic parameters).
 - IFRS 9 credit risk modelling.
 - Significant increase in credit risk.
 - Asset lifetimes.
- Measurement uncertainty and ECL sensitivity analysis.
- Trading activities.
- Banking activities (except PDs and additional Stage 2/3 analysis).

Sources of risk

The principal sources of credit risk for the Group are lending, off-balance sheet products, derivatives and securities financing, debt securities, and settlement risk through trading activities.

Key developments

- The key development in 2018 has been the ongoing transfer of assets between the Group and RBS Group.
- Within that portfolio, credit quality has been broadly stable.
- A Group Credit Risk function has been established and independent governance has been set up.

Risk governance

Credit risk management activities include:

- Defining credit risk appetite for the management of concentration risk and credit policy to establish the key risks in the process of providing credit and the controls that must be in place to mitigate them.
- Approving credit limits for customers.
- Oversight of the first line of defence to ensure that credit risk remains within the risk appetite set by the Board and that credit policy controls are being operated adequately and effectively.

A Credit Portfolio Risk Committee provides oversight of the overall credit risk profile and sector/product/asset class concentrations.

Risk appetite

The Group's approach to lending is governed by comprehensive credit risk appetite frameworks which are operated across the RBS Group. The frameworks are closely monitored and actions are taken to adapt lending criteria as appropriate. Credit risk appetite aligns to the strategic risk appetite set by the Group Board, which includes capital adequacy, earnings volatility, funding and liquidity, and stakeholder confidence. The credit risk appetite frameworks have been designed to reflect factors (for example, strategic and emerging risks) that influence the ability to operate within risk appetite. Tools such as stress testing and economic capital are used to measure credit risk volatility and develop links between the credit risk appetite frameworks and risk appetite limits. The frameworks are supported by a suite of transaction acceptance standards that set out the risk parameters within which franchises should operate.

The four formal frameworks used – and their basis for classification – are detailed in the following table.

Framework	Basis for classification	
	Measure	Other
Single name concentration	Exposure	Risk – based on loss given default for a given probability of default
Sector		Risk – based on economic capital and other qualitative factors
Country		Probability of default of a sovereign and average loss given default
Product and asset class		Risk – based on heightened risk characteristics

Risk controls

Credit policies define mandatory controls, which are subject to assurance testing.

Risk identification and measurement

Credit stewardship

Risks are identified through relationship management and/or credit stewardship of portfolios or customers. Credit risk stewardship takes place throughout the customer relationship, beginning with the initial approval. It includes the application of credit assessment standards, credit risk mitigation and collateral, ensuring that credit documentation is complete and appropriate, carrying out regular portfolio or customer reviews and problem debt identification and management.

Risk models

The output of credit risk models is used in the credit approval process – as well as for ongoing assessment, monitoring and reporting – to inform risk appetite decisions. These models are divided into different categories. Where the calculation method is on an individual counterparty or account level, the models used will be probability of default (PD), loss given default (LGD), or exposure at default (EAD). The economic capital model is used for credit risk appetite setting.

Asset quality

All credit grades map to an asset quality scale, used for external financial reporting. For customers, a master grading scale is used for internal management reporting across portfolios. Accordingly, measures of risk exposure may be aggregated and reported at differing levels of detail depending on stakeholder or business requirements. Performing loans are defined as AQ1-AQ9 (where the PD is less than 100%) and non-performing loans as AQ10 or Stage 3 under IFRS 9 (where the PD is 100%).

Risk mitigation

Risk mitigation techniques, as set out in the appropriate credit policies, are used in the management of credit portfolios across the Group. These techniques mitigate credit concentrations in relation to an individual customer, a borrower group or a collection of related borrowers. Where possible, customer credit balances are netted against obligations. Mitigation tools can include structuring a security interest in a physical or financial asset, the use of credit derivatives including credit default swaps, credit-linked debt instruments and securitisation structures, and the use of guarantees and similar instruments (for example, credit insurance) from related and third parties.

Counterparty credit risk

Counterparty credit risk arises from the obligations of our customers under derivative and securities financing transactions. It is a material part of the Group's credit risk.

In addition to the credit risk management practices set out in this section, the Group mitigates counterparty credit risk arising from both derivatives transactions and repurchase agreements through the use of market standard documentation, enabling netting (for credit risk management only and not for accounting purposes), and through collateralisation.

Amounts owed by the Group to a counterparty are netted against amounts the counterparty owes the Group, in accordance with relevant regulatory and internal policies. Netting is only applied if a netting agreement is in place.

Risk assessment and monitoring

Customers – including corporates, banks and other financial institutions – are grouped by industry sectors and geography as well as by product/asset class and are managed on an individual basis. Consideration is given to identifying groups of individual customers with sufficient inter-connectedness to merit assessment as a single risk.

A credit assessment is carried out before credit facilities are made available to customers. The assessment process is dependent on the complexity of the transaction.

Capital and risk management

Credit risk continued

For lower risk transactions below specific thresholds, credit decisions can be approved through self-sanctioning by the business, within the approved matrix limits. This process is facilitated through systems, strategies and policy rules to provide a credit decision.

For all other transactions credit is only granted to customers following joint approval by an approver from the business and the credit risk function, or by two credit officers. The joint business and credit approvers act within a delegated approval authority under the Wholesale Credit Authorities Framework Policy. The level of delegated authority held by approvers is dependent on their experience and expertise with only a small number of senior executives holding the highest approval authority. Both business and credit approvers are accountable for the quality of each decision taken, although the credit risk approver holds ultimate sanctioning authority.

Transaction Acceptance Standards provide detailed transactional lending and risk acceptance metrics and structuring guidance. As such, these standards provide a mechanism to manage risk appetite at the customer/transaction level and are supplementary to the established credit risk appetite.

Credit grades (PD and LGD) are reviewed and if appropriate re-approved annually. The review process assesses borrower performance, including reconfirmation or adjustment of risk parameter estimates; the adequacy of security; compliance with terms and conditions; and refinancing risk.

Underwriting standards are monitored on an ongoing basis to ensure they remain adequate in the current market environment and are not weakened to sustain growth.

A key aspect of credit risk stewardship is ensuring that, when signs of customer stress are identified, appropriate debt management actions are applied.

Problem debt management

Early problem identification

Each segment and sector has defined early warning indicators to identify customers experiencing financial difficulty, and to increase monitoring if needed. Early warning indicators may be internal, such as a customer's bank account trade/transaction activity, or external, such as a publicly-listed customer's share price. If early warning indicators show a customer is experiencing potential or actual difficulty, or if relationship managers or credit officers identify other signs of financial difficulty they may decide to classify the customer within the Risk of Credit Loss framework.

Risk of Credit Loss framework

The framework focuses on customers whose credit profiles have deteriorated since origination. Expert judgement is applied by experienced credit risk officers to classify cases into categories that reflect progressively deteriorating credit risk to the Group. There are two classifications which apply to non-defaulted customers within the framework – Heightened Monitoring and Risk of Credit Loss. For the purposes of provisioning, all exposures subject to the framework are categorised as Stage 2 and subject to a lifetime loss assessment. The framework also applies to those customers that have met the Group's default criteria (AQ10 exposures). Defaulted exposures are categorised as Stage 3 impaired for provisioning purposes.

Heightened Monitoring customers are performing customers that have met certain characteristics, which have led to significant credit deterioration. Collectively, characteristics reflect circumstances that may affect the customer's ability to meet repayment obligations. Characteristics include trading issues, covenant breaches, material PD downgrades and past due facilities.

Heightened Monitoring customers require pre-emptive actions (outside the customer's normal trading patterns) to return or maintain their facilities within the Group's current risk appetite prior to maturity.

Risk of Credit Loss customers are performing customers that have met the criteria for Heightened Monitoring and also pose a risk of credit loss to the Group in the next 12 months (should mitigating action not be taken or not be successful).

Once classified as either Heightened Monitoring or Risk of Credit Loss, a number of mandatory actions are taken in accordance with policies. Actions include a review of the customer's credit grade, facility and security documentation and the valuation of security. Depending on the severity of the financial difficulty and the size of the exposure, the customer relationship strategy is reassessed by credit officers, by specialist credit risk or relationship management units in the relevant business or by Restructuring.

Agreed customer management strategies are regularly monitored by both the business and credit teams. The largest Risk of Credit Loss exposures are regularly reviewed by a Risk of Credit Loss Committee. The committee members are experienced credit, business and restructuring specialists. The purpose of the committee is to review and challenge the strategies undertaken for customers that pose the largest risk of credit loss to the Group.

Appropriate corrective action is taken when circumstances emerge that may affect the customer's ability to service its debt (refer to Heightened Monitoring characteristics). Corrective actions may include granting a customer various types of concessions. Any decision to approve a concession will be a function of specific appetite, the credit quality of the customer, the market environment and the loan structure and security. All customers granted forbearance are classified Heightened Monitoring as a minimum.

Other potential outcomes of the relationship review are to: remove the customer from the Risk of Credit Loss framework, offer additional lending and continue monitoring, transfer the relationship to Restructuring if appropriate, or exit the relationship.

Restructuring

Problem debt portfolio customer relationships are mainly managed by the Restructuring team. The purpose of Restructuring is to protect the Group's capital. Where practicable, Restructuring does this by working with corporate and commercial customers to support their turnaround and recovery strategies and enable them to return to mainstream banking. Restructuring will always aim to recover capital in a fair and efficient manner.

Specialists in Restructuring work with customers experiencing financial difficulties and showing signs of financial stress. Throughout Restructuring's involvement the mainstream relationship manager will remain an integral part of the customer relationship, unless an exit strategy is deemed appropriate. The objective is to find a mutually acceptable solution, including restructuring of existing facilities, repayment or refinancing.

Where a solvent outcome is not possible, insolvency may be considered as a last resort. However, helping the customer return to financial health and restoring a normal banking relationship is always the preferred outcome.

Forbearance (audited)

Forbearance takes place when a concession is made on the contractual terms of a loan/debt in response to a customer's financial difficulties.

The aim of forbearance is to support and restore the customer to financial health while minimising risk. To ensure that forbearance is appropriate for the needs of the customer, minimum standards are applied when assessing, recording, monitoring and reporting forbearance.

A loan/debt may be forborne more than once, generally where a temporary concession has been granted and circumstances warrant another temporary or permanent revision of the loan's terms.

Capital and risk management

Credit risk continued

Types of forbearance

The type of forbearance offered is tailored to the customer's individual circumstances and may involve covenant waivers, amendments to margins, payment concessions and loan rescheduling (including extensions in contractual maturity), capitalisation of arrears, and debt forgiveness or debt-for-equity swaps.

Monitoring of forbearance

In the Wholesale portfolio, customer PDs and facility LGDs are re-assessed prior to finalising any forbearance arrangement. The ultimate outcome of a forbearance strategy is highly dependent on the cooperation of the borrower and a viable business or repayment outcome. Where forbearance is no longer appropriate, the Group will consider other options such as the enforcement of security, insolvency proceedings or both, although these are options of last resort.

Provisioning for forbearance

Provisions for forbore loans are assessed in accordance with normal provisioning policies. The customer's financial position and prospects – as well as the likely effect of the forbearance, including any concessions granted, and revised PD or LGD gradings – are considered in order to establish whether an impairment provision is required.

Loans granted forbearance are individually assessed in most cases. Performing loans subject to forbearance treatment are categorised as Stage 2 and subject to a lifetime loss assessment.

Forbearance may result in the value of the outstanding debt exceeding the present value of the estimated future cash flows. This difference will lead to a customer being classified as non-performing.

In the case of non-performing forbore loans, an individual loan impairment provision assessment generally takes place prior to forbearance being granted. The amount of the loan impairment provision may change once the terms of the forbearance are known, resulting in an additional provision charge or a release of the provision in the period the forbearance is granted.

The transfer of loans from impaired to performing status follows assessment by relationship managers and credit. When no further losses are anticipated and the customer is expected to meet the loan's revised terms, any provision is written-off or released and the balance of the loan returned to performing status. This is not dependent on a specified time period and follows the credit risk manager's assessment.

Impairment, provisioning and write-offs (audited)

In the overall assessment of credit risk, impairment, provisioning and write-offs are used as key indicators of credit quality.

The new IFRS 9 impairment provisions accounting standard was implemented with effect from 1 January 2018. Set out below is further detail regarding the impact of the transition from IAS 39 to IFRS 9 impairment provisioning, how key credit risk management activities link to IFRS 9 impairment provisioning and the key policy and modelling decisions that have been made in implementing IFRS 9 (refer also to Accounting policy 14 and Note 14 on the accounts).

Transition from IAS 39 to IFRS 9 (audited)

RBS Group implemented IFRS 9 with effect from 1 January 2018 with no restatement of comparatives other than the day one impact on implementation reflected in opening equity.

Cash flows and cash losses are unchanged by the change in impairment framework from IAS 39 to IFRS 9. IFRS 9 has changed the basis of loss calculation to expected loss (forward-looking), as opposed to the incurred loss model under IAS 39, which focused only on losses that had already occurred. There are a number of changes as well as judgements involved in measuring expected credit loss (ECL). New elements include:

- Move from incurred loss model to expected loss model, including all performing assets having 12-month ECL on origination.
- Determination of significant increase in credit risk – this moves a subset of assets from a 12-month ECL (Stage 1) to lifetime ECL (Stage 2) when credit risk has significantly increased since origination.
- Change in scope of impaired assets (Stage 3).
- Incorporation of forward-looking information, including multiple economic scenarios (MES). MES are assessed in order to identify non-linearity of losses in the portfolio.

The overall provisioning requirement under IFRS 9 increased by £40 million, a 32% increase relative to IAS 39. The main driver of the increase was the requirement to hold a lifetime loss for assets that have exhibited a significant increase in credit risk.

Key differences in moving from IAS 39 to IFRS 9 on impairment loss (audited)

	Total £m
31 December 2017 - IAS 39 impairment provision	123
Impact of IFRS 9	40
1 January 2018 - IFRS 9 ECL	163

Capital and risk management

Credit risk *continued*

Key elements of IFRS 9 impairment provisions (audited)

IFRS 9 introduced additional complexity into the determination of credit impairment provisioning requirements. However, the building blocks that deliver an ECL calculation already existed in the RBS Group. Existing Basel models were used as a starting point in the construction of IFRS 9 models, which also incorporate term extension and forward-looking information.

Five key areas may materially influence the measurement of credit impairment under IFRS 9 – two of these relate to model build and three relate to their application:

- **Model build:**
 - The determination of economic indicators that have most influence on credit loss for each portfolio and the severity of impact (this leverages existing stress testing mechanisms).
 - The build of term structures to extend the determination of the risk of loss beyond 12 months that will influence the impact of lifetime loss for assets in Stage 2.
- **Model application:**
 - The assessment of the significant increase in credit risk and the formation of a framework capable of consistent application.
 - The determination of asset lifetimes that reflect behavioural characteristics while also representing management actions and processes (using historical data and experience).
 - The determination of a base case (or central) economic scenario which has the most material impact (of all forward-looking scenarios) on the measurement of loss (the Group uses consensus forecasts to remove management bias).

Policy elections and simplifications relating to IFRS 9

In addition to the five key areas above, which are relevant from period to period, there was one further significant judgment that was made as a one-off exercise to support the Day One implementation: this was the application of the new IFRS 9 models to the determination of origination date metrics. Since it is not possible to determine the economic forecasts and alternative scenarios going backwards in time it is necessary to use a series of assumptions to enable this process. The Group assumed a flat economic forecast, for all dates historically. There were some other less significant judgments, elections and simplification assumptions that informed the ECL process; these were not seen as 'critical' in determining the appropriate level of impairment but represented choices taken by management across areas of estimation uncertainty. The main examples of these are:

- **Models** – for example in the case of some low default portfolios, Basel parameter estimates have been applied for IFRS 9.
- **Non-modelled portfolios** – certain portfolios have their Basel II capital requirement calculated under the standardised framework for regulatory purposes and do not have systematically modelled PDs, EADs and LGDs. Under IFRS 9, they have bespoke treatments for the identification of significant increase in credit risk and ECL provisions. With respect to the latter, benchmark PDs, EADs and LGDs are used with the benchmarks being reviewed annually for appropriateness.
- **Discounting of future losses** – the ECL calculation is based on expected future cash-flows. These are discounted using the effective interest rate – for practical purposes, this is typically applied at a portfolio level rather than being established and operated at an individual asset level.
- **Multiple economic scenarios (MES)** – it is the selection of the central (or base) scenario that is most critical to the ECL calculation, independent of the method used to generate a range of alternative outcomes and their probabilities. Different approaches to model MES around the central scenario have all been found of low significance for the overall ECL impact.

Economic loss drivers

Introduction (audited)

The portfolio segmentation and selection of economic loss drivers for IFRS 9 follow closely the approach already used in stress testing.

To enable robust modelling the forecasting models for each portfolio segment (defined by asset class and where relevant – industry sector and region) are based on a selected, small number of economic factors, (typically two to four) that best explain the temporal variations in portfolio loss rates. The process to select economic loss drivers involves empirical analysis and expert judgment.

The most material primary economic loss drivers include UK GDP, world GDP, the UK unemployment rate, the UK House Price Index, and base rate for the UK portfolios as relevant.

Central base case economic scenario (audited)

The internal base case scenario is the primary forward-looking economic information driving the calculation of ECL. The same base case scenario is used for the Group's financial planning. The key elements of the current economic base case, which includes forecasts over a five year forecast horizon, are summarised below.

The central scenario projects modest growth in the UK economy, in line with the consensus outlook. Brexit related uncertainty results in subdued confidence in the near term, placing it in the lower quartile of advanced economies. Business investment is weak at the start of the forecast, improving only gradually. Consumer spending rises steadily as households benefit from falling inflation and rising wage growth, though it is a modest upturn. The central scenario assumes slower job growth than seen in recent years, meaning unemployment edges up from its current historic lows. House price growth slows, extending the current slowdown, before picking up to low single digit growth in later years. Monetary policy follows the market implied path for Bank of England base rate at the time the scenarios were set, therefore it is assumed only two further base rate increases over the next five years.

For the purpose of calculating ECL the central base case economic scenario is adjusted to explicitly enforce a gradual reversion to long run average credit cycle conditions from the first projected year onwards. This adjustment process leverages the existing Wholesale credit models framework that utilises Credit Cycle Indices (CCI) to measure the point-in-time default rate conditions in a comprehensive set of region/industry groupings. The CCI are constructed by summarising market data based point-in-time PDs for all publicly listed entities in the respective region/industry grouping on a monthly frequency. Positive CCI values indicate better than average conditions, i.e. low default rates and a CCI value of zero indicates default rate conditions at long run average levels. The CCI can be interpreted as an aggregation of the primary economic loss drivers most relevant for each portfolio segment into a single measure. The central base case scenario forecasts provided at the level of economic loss drivers are fed into the ECL calculations by first translating them into corresponding CCI forecasts for each portfolio segment and subsequently applying the aforementioned mean-reversion adjustment.

Initially at transition, mean reversion was applied from year five onwards. Since H1 2018, mean reversion is applied from the first year onwards. The earlier application of the mean reversion adjustment was introduced to account for two empirical observations. Firstly historic credit loss rates in Wholesale portfolios show pronounced mean reversion behaviour and secondly, the accuracy of economic forecasts tends to drop significantly for horizons beyond one or two years.

Approach for MES (audited)

The response of portfolio loss rates to changes in economic conditions is typically non-linear and asymmetric. Therefore in order to appropriately take account of the uncertainty in economic forecasts a range of MES are considered when calculating ECL.

The approach to MES is a Monte Carlo method that involves simulating a large number of alternative scenarios around the central scenario (adjusted for mean reversion) and averaging the losses and PD values for each individual scenario into unbiased expectations of losses (ECL) and PD.

Capital and risk management

Credit risk continued

The simulation of alternative scenarios does not occur on the level of the individual economic loss drivers but operates on the aggregate CCI described earlier. Since the existing credit models for PD and LGD were already built within the CCI framework the chosen Monte Carlo method provided a conceptually rigorous but still efficient approach to implement the MES requirement.

The impact from MES is factored in to account level PDs through scalars. These MES-adjusted PDs are used to assess whether a significant increase in credit risk has occurred.

Economic parameters

UK	31 December 2018	1 January 2018
	Base case %	Base case %
GDP - change	1.7	1.7
Unemployment	5.0	5.3
House Price Inflation - change	1.7	3.1
Bank of England base rate	1.1	0.8
World GDP - change	2.7	2.6

UK economic uncertainty (audited)

The Group's 2018 results were prepared during the run up to the UK leaving the European Union, a period of elevated uncertainty over the UK economic outlook. The Group's approach to capturing that elevated uncertainty is to apply an overlay to ECL. Information is used from the earnings volatility scenario that is part of the 2018 planning process and credit risk appetite setting. Key elements include an alternative path the economy could take, being characterised as more severe than the Bank of England's "Disruptive Brexit" scenario (ACS) but less severe than the "Disorderly Brexit" scenario and then applying management judgement as to its likelihood. An overlay of £3 million booked in the third quarter of 2018 remained in place at the year end.

IFRS 9 credit risk modelling (audited)

IFRS 9 introduced lifetime ECL for the measurement of credit impairment. This required the development of new models or the enhancement of existing Basel models. IFRS 9 ECLs are calculated using a combination of:

- Probability of default.
- Loss given default.
- Exposure at default.

In addition, lifetime PDs (as at reporting date and at date of initial recognition) are used in the assessment of a significant increase in credit risk (SICR) criteria.

IFRS 9 ECL model design principles

To meet IFRS 9 requirements for ECL estimation, PD, LGD and EAD used in the calculations must be:

- Unbiased – material regulatory conservatism has been removed to produce unbiased model estimates.
- Point-in-time – recognise current economic conditions.
- Forward-looking – incorporated into PD estimates and, where appropriate, EAD and LGD estimates.
- For the life of the loan – all models produce a term structure to allow a lifetime calculation for assets in Stage 2 and Stage 3.

IFRS 9 requires that at each reporting date, an entity shall assess whether the credit risk on an account has increased significantly since initial recognition. Part of this assessment requires a comparison to be made between the current lifetime PD (i.e. the current probability of default over the remaining lifetime) with the equivalent lifetime PD as determined at the date of initial recognition.

Key economic loss drivers – average over the five year planning horizon (2019 to 2023 for 31 December 2018 and 2018 to 2022 for 1 January 2018) – in the most relevant planning cycle for the central base case are set out below.

For assets originated before IFRS 9 was introduced, comparable lifetime origination PDs did not exist. These have been retrospectively created using the relevant model inputs applicable at initial recognition. Due to data availability, two practical measures have been taken:

- Where model inputs were not available at the point of initial recognition the earliest available robust metrics were used. For instance, since Basel II was introduced in 2008, the earliest available and reliable production Basel PDs range from between December 2007 and April 2008 depending on the portfolio.
- Economic conditions at the date of initial recognition have been assumed to remain constant from that point forward.

PD estimates

PD models use the existing CCI based point-in-time/through-the-cycle framework to convert one-year regulatory PDs into point-in-time estimates that reflect current economic conditions across a comprehensive set of region/industry segments.

One year point-in-time PDs are then extrapolated to multi-year PDs using a conditional transition matrix approach. The conditional transition matrix approach allows the incorporation of forward-looking information, provided in the form of yearly CCI projections, by adjusting the credit state transition probabilities according to projected, forward-looking changes of credit conditions in each region/industry segment.

This results in forward-looking point-in-time PD term structures for each obligor from which the lifetime PD for a specific exposure can be calculated according to the exposure's residual contractual maturity.

LGD estimates

The general approach for the IFRS 9 LGD models was to leverage the Basel LGD models with bespoke IFRS 9 adjustments to ensure unbiased estimates, that is, the use of effective interest rate as the discount rate and the removal of downturn calibration, indirect costs, other conservatism and regulatory floors.

Current and forward-looking economic information is incorporated into the LGD estimates using the existing CCI framework. For low default portfolios (for example, sovereigns) loss data is too scarce to substantiate estimates that vary with systematic conditions. Consequently, for these portfolios, LGD estimates are assumed to be constant throughout the projection horizon.

Capital and risk management

Credit risk continued

EAD estimates

For Wholesale, EAD values are estimated on the basis of credit conversion factor (CCF) models. The Group have observed historic, realised CCF values to vary over time but there is no clear relationship between the temporal changes in CCF and economic conditions. The Group attribute changes in CCFs to changes in exposure management practices. Therefore the Group does not include forward-looking economic information into projected CCF/EAD. To ensure CCF values reflect most recent exposure management practices, the Group update CCF coefficients in the model frequently (typically annually) using the last five years of observed data.

Significant increase in credit risk (audited)

Exposures that are considered significantly credit deteriorated since initial recognition are classified in Stage 2 and assessed for lifetime ECL measurement (exposures not considered deteriorated carry a 12 month ECL). The Group has adopted a framework to identify deterioration based primarily on movements in probability of default supported by additional backstops. The principles applied are consistent across the Group and align to credit risk management practices.

The framework comprises the following elements:

- IFRS 9 lifetime PD assessment (the primary driver) – on modelled portfolios the assessment is based on the relative deterioration in forward-looking lifetime PD and is assessed monthly. To assess whether credit deterioration has occurred, the residual lifetime PD at balance sheet date (which PD is established at date of initial recognition) is compared to the current PD. If the current lifetime PD exceeds the residual origination PD by more than a threshold amount deterioration is assumed to have occurred and the exposure transferred to Stage 2 for a lifetime loss assessment. In broad terms, a doubling of PD would indicate a significant increase in credit risk. However, for Wholesale, the PD uplift must be at least 0.1%.
- Qualitative high-risk backstops – the PD assessment is complemented with the use of qualitative high-risk backstops to further inform whether significant deterioration in lifetime risk of default has occurred. The qualitative high-risk backstop assessment includes the use of the mandatory 30+ days past due backstop, as prescribed by IFRS 9 guidance, and other features such as forbearance support and exposures managed within the Risk of Credit Loss framework.

The criteria are based on a significant amount of empirical analysis and seek to meet three key objectives:

- Criteria effectiveness – the criteria should be effective in identifying significant credit deterioration and prospective default population.
- Stage 2 stability – the criteria should not introduce unnecessary volatility in the Stage 2 population.
- Portfolio analysis – the criteria should produce results which are intuitive when reported as part of the wider credit portfolio.

Asset lifetimes (audited)

The choice of initial recognition and asset duration is another critical judgement in determining the quantum of lifetime losses that apply. The date of initial recognition reflects the date that a transaction (or account) was first recognised on the balance sheet; the PD recorded at that time provides the baseline used for subsequent determination of SICR.

For asset duration, the approach applied (in line with IFRS 9 requirements) is:

- Term lending – the contractual maturity date, reduced for behavioural trends where appropriate (such as, expected pre-payment and amortisation).
- Revolving facilities – asset duration is based on annual counterparty review schedules and will be set to the next review date.

Measurement uncertainty and ECL sensitivity analysis (audited)

The recognition and measurement of ECL is highly complex and involves the use of significant judgement and estimation. This includes the formulation and incorporation of multiple forward-looking economic conditions into ECL to meet the measurement objective of IFRS 9.

The ECL provision is sensitive to the model inputs and economic assumptions underlying the estimate. Set out below is the impact of some of the material sensitivities considered for 2018 year end reporting. These ECL simulations are separate to the impact arising from MES as described earlier in this disclosure, which impacts are embedded in the reported ECL. Given the current benign environment for impairments the focus is on downsides to the existing ECL provision levels.

The focus of the simulations is on ECL provisioning requirements on performing exposures in Stage 1 and Stage 2. The simulations are run on a stand-alone basis and are independent of each other; the potential ECL uplifts reflect the simulated impact at the year end balance sheet date. As default is an observed event as at the balance sheet date, Stage 3 provisions are not subject to the same level of measurement uncertainty, and therefore have not been considered in this analysis. The following common scenarios have been applied across the key portfolios:

- **Economic uncertainty** – simulating the impact arising from the Downside 2 scenario, which is one of the five discrete scenarios used in the Group methodology for personal MES. In the simulation the Group have assumed that the economic macro variables associated with the Downside 2 scenario replace the existing base case economic assumptions and still using the Monte Carlo approach to simulate the impact of MES around the base case economic scenario.
- As reflected in the economic metrics in the following table, the Downside 2 scenario assumes a significant economic downturn in the UK in 2019 running in to 2020, with recovery in the later years. UK GDP turns negative in 2019 compared to the base case assumption of continued growth, unemployment increases and peaks at the end of 2020. House prices fall in both 2019 and 2020 before starting to recover, and interest rates are assumed to be lower for longer.

	Base case economic parameters					Downside 2 economic parameters				
	2019 Q4	2020 Q4	2021 Q4	2022 Q4	2023 Q4	2019 Q4	2020 Q4	2021 Q4	2022 Q4	2023 Q4
UK	%	%	%	%	%	%	%	%	%	%
GDP (year-on-year)	1.7	1.5	1.9	1.8	1.8	(1.2)	1.2	2.7	2.0	2.1
Unemployment rate	4.8	5.0	5.1	5.1	5.1	6.7	7.4	7.3	6.9	6.4
House Price Inflation (year-on-year)	1.1	0.7	1.5	2.3	3.4	(7.0)	(4.5)	1.0	4.1	6.3
Bank of England rate	1.0	1.0	1.3	1.3	1.3	—	—	—	—	—
World GDP (year-on-year)	2.7	2.4	2.9	2.7	2.5	(0.8)	3.1	4.4	3.2	2.8

Capital and risk management

Credit risk continued

This scenario has been applied to all modelled portfolios in the analysis below, with the simulation impacting both PDs and LGDs. For some portfolios this creates a significant impact on ECL, for others less so but on balance the impact is deemed reasonable. In this simulation, it is assumed the existing modelled relationship between key economic variables and loss drivers holds good.

- **Portfolio risk** – evaluation of the impact of a movement in one of the key metrics, PD, simulating a relative 25% upward shift in PDs.

These common scenarios were complemented with a specific portfolio simulation:

- **Wholesale portfolios** – simulating the impact of PDs moving upwards to the through-the-cycle (TTC) average from their current point-in-time (PIT) estimate. This simulation looks solely at PD

movements, potential movements in LGD rates have not been considered. With the current benign economic conditions Wholesale IFRS 9 PIT PDs are significantly lower than TTC PD. This scenario shows the increase to ECL by immediately switching to TTC PDs providing an indication of long run average expectations. IFRS 9 PDs have been used so there remains some differences to Basel TTC PDs where conservative assumptions are required, such as caps or floors, not permitted under the IFRS 9 best estimate approach.

The Group's core criterion to identify a significant increase in credit risk is founded on PD deterioration, as discussed above. Under the simulations, PDs increase and result in exposures moving from Stage 1 to Stage 2 contributing to the ECL uplift.

Economic sensitivity analysis

	Actual position at 31 December 2018			Common scenarios (3)						Discrete scenarios (3)		
	Stage 1 and Stage 2 (1)			Downside 2			25% PD increase			TTC PD potential		
	of which in		ECL provision (2)	Exposure		Stage 2	Exposure in		Stage 2	ECL uplift		Exposure in Stage 2
	£bn	%		Potential ECL uplift	%		Potential ECL uplift	%		£m	%	
Wholesale	33.3	1.6	18.6	3.0	15.9	1.9	7.6	40.7	2.3	2.0	10.5	1.8

Notes:

- (1) Reflects drawn exposure and ECL for all modelled exposure in scope for IFRS 9; in addition to loans this includes bonds, and cash.
- (2) The ECL provision includes the ECL overlay taken in quarter 3 to recognise the elevated economic uncertainty in the UK in the period running up to the UK leaving the European Union.
- (3) All simulations are run on a stand-alone basis and are independent of each other, with the potential ECL uplift reflecting the simulated impact at the year end balance sheet date.

Key points

- In the Downside 2 scenario, the ECL requirement overall was simulated to increase by £3 million on Stage 1 and Stage 2 exposures from the current level of £19 million. The simulation estimates the balance sheet ECL requirement as at 31 December 2018 and assumes that the economic variables associated with the Downside 2 scenario had been the Group's base case economic assumption at that time.
- The 25% PD increase scenario has the most significant impact on ECL as the scenario increases all PDs by 25% thereby moving more exposure into Stage 2.
- The TTC PD scenario has a low impact on ECL as the difference between PIT and TTC PDs is relatively small.
- Downside 2 scenario has a low ECL impact reflecting the high quality of NWM core exposures.

Credit risk – Trading activities

This section covers the credit risk profile of the Group's trading activities. All disclosures are audited.

Securities financing transactions and collateral (audited)

	Reverse repos			Repos		
	Total £m	Of which: can be offset £m	Outside netting arrangements £m	Total £m	Of which: can be offset £m	Outside netting arrangements £m
2018						
Gross	56,143	53,157	2,986	57,445	56,288	1,157
IFRS offset	(31,376)	(31,376)	—	(31,376)	(31,376)	—
Carrying value	24,767	21,781	2,986	26,069	24,912	1,157
Master netting arrangements	(762)	(762)	—	(762)	(762)	—
Securities collateral	(21,009)	(21,009)	—	(24,150)	(24,150)	—
Potential for offset not recognised under IFRS	(21,771)	(21,771)	—	(24,912)	(24,912)	—
Net	2,996	10	2,986	1,157	—	1,157
2017						
Gross	71,254	65,540	5,714	61,001	58,694	2,307
IFRS offset	(32,639)	(32,639)	—	(32,639)	(32,639)	—
Carrying value	38,615	32,901	5,714	28,362	26,055	2,307
Master netting arrangements	(329)	(329)	—	(329)	(329)	—
Securities collateral	(32,530)	(32,530)	—	(25,726)	(25,726)	—
Potential for offset not recognised under IFRS	(32,859)	(32,859)	—	(26,055)	(26,055)	—
Net	5,756	42	5,714	2,307	—	2,307

Key points

- The reductions in reverse repo and repo balances, on both a gross and carrying value basis in 2018 relative to the prior year, are largely due to the business having managed exposures in line with becoming a non-ring fenced bank.
- Reverse repo and repo transactions are primarily backed by highly-rated sovereign, supranational and agency security collateral.

Capital and risk management

Credit risk – Trading activities continued

Derivatives (audited)

The table below summarises third party derivatives by type of contract. The master netting agreements and collateral shown below do not result in a net presentation on the balance sheet under IFRS 9.

	2018					2017				
	Notional				Total £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
	GBP £bn	USD £bn	Euro £bn	Other £bn						
Gross exposure						135,133	131,173		174,489	168,886
IFRS offset						(2,072)	(2,438)		(15,573)	(16,042)
Carrying value	2,673	5,096	4,286	1,631	13,686	133,061	128,735	15,192	158,916	152,844
Of which:										
Interest rate (1)										
Interest rate swaps						81,622	73,933		97,338	89,582
Options purchased						14,478	—		21,733	—
Options written						—	16,370		—	21,015
Futures and forwards						73	68		145	110
Total	2,299	3,560	3,649	739	10,247	96,173	90,371	11,751	119,216	110,707
Exchange rate										
Spot, forwards and futures						17,897	18,605		19,239	19,079
Currency swaps						11,283	11,978		11,017	13,418
Options purchased						7,319	—		8,765	—
Options written						—	7,558		—	8,975
Total	373	1,528	629	892	3,422	36,499	38,141	3,400	39,021	41,472
Credit	1	7	8	—	16	346	208	38	531	558
Equity and commodity	—	1	—	—	1	43	15	3	148	107
Carrying value					13,686	133,061	128,735	15,192	158,916	152,844
Counterparty mark-to-market netting						(106,762)	(106,762)		(127,932)	(127,932)
Cash collateral						(17,930)	(15,224)		(20,297)	(18,028)
Securities collateral						(4,469)	(3,466)		(5,836)	(3,952)
Net exposure						3,900	3,283		4,851	2,932
Of which outside netting arrangements						1,933	1,599		1,793	1,510
Net exposure - intercompany						1,189	1,179		276	400
Net exposure - disposal groups						—	—		1,298	1,129
Banks (2)						359	431		439	543
Other financial institutions (3)						857	1,068		210	305
Corporate (4)						2,436	1,749		3,744	2,010
Government (5)						248	35		458	74
Net exposure						3,900	3,283		4,851	2,932
UK						1,867	1,246		2,787	729
Europe						1,117	1,366		1,540	1,690
US						588	298		248	161
RoW						328	373		276	352
Net exposure						3,900	3,283		4,851	2,932
Asset quality of uncollateralised derivative assets										
AQ1-AQ4						3,133			3,668	
AQ5-AQ8						743			1,179	
AQ9						3			2	
AQ10						21			2	
Net exposure						3,900			4,851	

Notes:

- (1) The notional amount of interest rate derivatives include £5,679 billion (2017 – £7,141 billion) in respect of contracts cleared through central clearing counterparties.
- (2) Transactions with certain counterparties with whom the Group has netting arrangements but collateral is not posted on a daily basis; certain transactions with specific terms that may not fall within netting and collateral arrangements; derivative positions in certain jurisdictions for example China where the collateral agreements are not deemed to be legally enforceable.
- (3) Transactions with securitisation vehicles and funds where collateral posting is contingent on the Group's external rating.
- (4) Mainly large corporates with whom the Group may have netting arrangements in place, but operational capability does not support collateral posting.
- (5) Sovereigns and supranational entities with one-way collateral agreements in their favour.

Capital and risk management

Credit risk – Trading activities continued

Derivatives: settlement basis and central counterparties (audited)

The table below summarises the derivative notional and fair value by trading and settlement method.

	Notional				Asset		Liability	
	Traded over the counter				Traded on recognised exchanges	Traded over the counter	Traded on recognised exchanges	Traded over the counter
	Traded on recognised exchanges	Settled by central counterparties	Not settled by central counterparties	Total				
2018	£bn	£bn	£bn	£bn	£m	£m	£m	£m
Interest rate	1,642	5,679	2,926	10,247	—	96,173	—	90,371
Exchange rate	4	—	3,418	3,422	—	36,499	—	38,141
Credit	—	—	16	16	—	346	—	208
Equity and commodity	—	—	1	1	—	43	—	15
Total	1,646	5,679	6,361	13,686	—	133,061	—	128,735
2017								
Interest rate	1,506	7,141	3,104	11,751	—	119,216	—	110,707
Exchange rate	4	—	3,396	3,400	—	39,021	—	41,472
Credit	—	—	38	38	—	531	—	558
Equity and commodity	—	—	3	3	—	148	1	106
Total	1,510	7,141	6,541	15,192	—	158,916	1	152,843

Debt securities (audited)

The table below summarises debt securities held at mandatory fair value through profit or loss by issuer as well as ratings based on the lowest of Standard & Poor's, Moody's and Fitch.

2018	Central and local government			Financial institutions	Corporate	Total
	UK	US	Other			
	£m	£m	£m	£m	£m	£m
AAA	—	—	2,093	1,459	7	3,559
AA to AA+	6,834	4,689	3,161	773	120	15,577
A to AA-	—	—	4,571	482	51	5,104
BBB- to A-	—	—	3,592	802	285	4,679
Non-investment grade	—	—	81	832	237	1,150
Unrated	—	—	—	570	8	578
Total	6,834	4,689	13,498	4,918	708	30,647
Short positions	(6,394)	(2,008)	(13,500)	(1,724)	(201)	(23,827)
2017						
AAA	—	—	1,474	1,576	21	3,071
AA to AA+	3,514	3,667	2,386	984	168	10,719
A to AA-	—	—	7,224	427	78	7,729
BBB- to A-	—	—	3,267	796	493	4,556
Non-investment grade	—	—	385	552	171	1,108
Unrated	—	—	—	255	43	298
Total	3,514	3,667	14,736	4,590	974	27,481
Short positions	(3,490)	(2,501)	(20,390)	(1,945)	(201)	(28,527)

Asset quality (audited)

The table below summarises the net credit exposure by high level asset class and asset quality. It represents total credit risk for assets held in the banking book in addition to counterparty credit risk for traded products.

2018	Cash & balances at central banks	Sovereign debt securities	Loans & other lending	Other debt securities	Collateralised rate risk management	Uncollateralised rate risk management	Repo & reverse repo	Off-balance sheet items	Leasing	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
AQ1-AQ4	11,230	6,964	7,773	2,191	3,976	2,356	1,630	380	144	36,644
AQ5-AQ8	—	—	896	4	354	536	157	59	—	2,006
AQ9	—	—	23	3	2	—	—	—	—	28
AQ10	—	—	602	6	—	23	—	5	5	641
Current exposure	11,230	6,964	9,294	2,204	4,332	2,915	1,787	444	149	39,319
Potential exposure	11,230	6,964	18,516	2,204	15,097	6,634	2,882	2,594	149	66,270
2017										
AQ1-AQ4	187	469	5,683	1,501	5,053	4,227	2,084	532	5	19,741
AQ5-AQ8	—	—	1,318	4	450	958	86	459	1	3,276
AQ9	—	—	28	—	2	—	—	1	—	31
AQ10	—	—	543	18	—	8	—	9	(8)	570
Current exposure	187	469	7,572	1,523	5,505	5,193	2,170	1,001	(2)	23,618
Potential exposure	200	469	17,018	1,523	18,385	10,048	3,488	3,846	(2)	54,975

Key points

- Measured against the Group's asset quality scale, 93% of total current exposure was rated in the AQ1-AQ4 bands. When considered against external credit ratings, 95% (£37.5 billion) of current exposure was equivalent to an investment grade rating (BBB- or better).
- Treasury assets were split between legal entities following ring-fencing. The addition of Treasury assets was the main reason for substantial increase in exposure, particularly in AQ1-AQ4 cash and balances at central banks and sovereign debt securities.
- Credit quality across the portfolio remained stable reflecting resilient market conditions during the year. Of the AQ1-AQ4 loans balances of £7.8 billion, 98% related to Stage 1. Of the AQ5-AQ8 balances of £0.9 billion, 89% related to Stage 1 and 11% related to Stage 2. AQ10 balances were all Stage 3 and consisted of a small number of long standing legacy cases mainly subject to protracted litigation or insolvency processes. This included £166 million of purchased or originated credit impaired assets..
- The difference in potential and current exposure mainly related to the variation in measurement of counterparty credit risk.

Capital and risk management

Credit risk – Banking activities

All the disclosures in this section are audited with the exception of Stage 2 analysis.

Introduction

This section covers the credit risk profile of the Group's banking activities. Exposures and credit risk measures presented as of and for year ended 31 December 2018 and at 1 January 2018 are on an IFRS 9 basis. Exposures and credit risk measures as of and for the year ended 31 December 2017 are on an IAS 39 basis.

Refer to Accounting policy 14 and Note 14 on the accounts for revisions to policies and critical judgements relating to impairment loss determination.

Banking activities include a small number of portfolios that were carried at fair value, the most significant of which was the lender-option/buyer-option portfolio of £370 million.

Financial instruments within the scope of the IFRS 9 ECL framework (audited)

Refer to Note 11 on the accounts for balance sheet analysis of financial assets that are classified as amortised cost (AC) or fair value through other comprehensive income (FVOCI), the starting point for IFRS 9 ECL framework assessment.

Financial assets

Of the total third party £33.1 billion AC and FVOCI balance (gross of ECL), £30.1 billion or 91% was within the scope of the IFRS 9 ECL

framework and comprised by stage: Stage 1 £29.1 billion; Stage 2 £0.4 billion and Stage 3 £0.7 billion. Total assets within IFRS 9 ECL scope comprised the following by balance sheet caption and stage:

- Loans: £9.1 billion of which Stage 1 £8.1 billion; Stage 2 £0.4 billion and Stage 3 £0.7 billion.
- Other financial assets: £21.0 billion, comprising balances at central banks £11.2 billion and debt securities of £9.8 billion, of which Stage 1 £21.0 billion; Stage 2 nil and Stage 3 nil.

Those assets outside the IFRS 9 ECL framework were as follows:

- Settlement balances, items in the course of collection, cash balances and other non-credit risk assets of £2.7 billion. These were assessed as having no ECL unless there was evidence that they were credit impaired.
- Equity shares of £0.3 billion as not within the IFRS 9 ECL framework by definition.

In scope assets also include £2.6 billion of inter-Group assets.

Contingent liabilities and commitments

In addition to contingent liabilities and commitments disclosed in Note 27 on the accounts – reputationally-committed limits are also included in the scope of the IFRS 9 ECL framework. These are offset by £0.5 billion out of scope balances primarily related to facilities that, if drawn would not be classified as AC or FVOCI, or undrawn limits relating to financial assets exclusions. Total contingent liabilities (including financial guarantees) and commitments within IFRS 9 ECL scope of £18.4 billion comprised Stage 1; £18.1 billion; Stage 2 £0.2 billion and Stage 3 £0.1 billion.

Portfolio summary (audited)

The table below summarises gross loans and ECL, by segment and stage, within the scope of the IFRS 9 ECL framework.

31 December 2018	NWM £m	Central items & other £m	Total £m	1 January 2018 Total £m
Loans - amortised cost				
- Stage 1	7,864	224	8,088	8,535
- Stage 2	343	22	365	775
- Stage 3	671	—	671	342
- Inter-Group	—	—	2,634	28
Total	8,878	246	11,758	9,680
ECL provisions (1)				
- Stage 1	6	—	6	2
- Stage 2	8	—	8	33
- Stage 3	61	1	62	108
Total	75	1	76	143
ECL provisions coverage (2)				
- Stage 1 (%)	0.08	—	0.07	0.02
- Stage 2 (%)	2.33	—	2.19	4.26
- Stage 3 (%)	9.09	—	9.24	31.58
Total	0.84	0.41	0.83	1.48
ECL charge (3)				
- Third party	(93)	(14)	(107)	
- Inter-Group	—	—	5	
Total	(93)	(14)	(102)	
Impairment losses				
- ECL loss rate - annualised (basis points)	(105)	(569)	(117)	
- Amounts written-off	69	—	69	

Notes:

- (1) ECL provisions in the table are provisions on loan assets only. Other ECL provisions, not included, relate to cash at central banks, debt securities and contingent liabilities, and amount to £10 million, of which FVOCI is £2 million.
- (2) ECL provisions coverage is ECL provisions divided by loans - amortised cost.
- (3) ECL charge balances include a £3 million charge relating to other financial assets, of which a £1 million charge related to assets at FVOCI; and a £3 million release related to contingent liabilities.
- (4) ECL provisions on inter-Group loans were £0.2 million at 31 December 2018, which gave a provision coverage of 0.02%.
- (5) The above table relates to loans only. Other financial assets within the scope of the IFRS 9 ECL framework at 31 December 2018 were cash at central banks of £11.2 billion and debt securities of £9.8 billion.

Capital and risk management

Credit risk – Banking activities continued

Portfolio summary – sector analysis

The table below summarises financial assets and off-balance sheet exposures gross of ECL and related ECL provisions, impairment and past due by sector, asset quality and geographical region based on the country of operation of the customer. Except where indicated, the tables below report only third party exposures and related ECL provisions, charges and write-offs.

2018	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m
Loans by geography	659	1,836	6,569	60	9,124
- UK	39	1,424	3,237	50	4,750
- RoI	—	1	243	—	244
- Other Europe	609	83	1,165	8	1,865
- RoW	11	328	1,924	2	2,265
Loans by stage	659	1,836	6,569	60	9,124
Stage 1	84	1,628	6,318	58	8,088
Stage 2	—	120	245	—	365
Stage 3	575	88	6	2	671
Weighted average life *					
- ECL measurement (years)	4	4	9	5	5
Weighted average 12 months PDs *					
- IFRS 9 (%)	0.17	0.71	0.13	0.03	0.20
- Basel (%)	0.23	0.66	0.15	0.02	0.18
ECL provisions by geography	8	53	15	—	76
- UK	5	2	8	—	15
- Other Europe	3	24	6	—	33
- RoW	—	27	1	—	28
ECL provisions by stage	8	53	15	—	76
- Stage 1	—	—	6	—	6
- Stage 2	—	3	5	—	8
- Stage 3	8	50	4	—	62
ECL provisions coverage	1.21	2.89	0.23	—	0.83
- Stage 1 (%)	—	—	0.09	—	0.07
- Stage 2 (%)	—	2.50	2.04	—	2.19
- Stage 3 (%)	1.39	56.82	66.67	—	9.24
ECL charge	(74)	(40)	6	1	(107)
- Third party	(74)	(40)	6	1	(107)
ECL loss rate (%)	(11.23)	(2.18)	0.09	1.67	(1.17)
Amounts written-off	10	53	6	—	69
Other financial assets by asset quality (1)	105	64	2,721	18,099	20,989
- AQ1-AQ4	105	—	2,547	18,099	20,751
- AQ5-AQ8	—	64	167	—	231
- AQ9	—	—	4	—	4
- AQ10	—	—	3	—	3
Off-balance sheet	385	2,209	12,618	3,226	18,438
- Loan commitments	338	2,032	12,376	3,226	17,972
- Financial guarantees	47	177	242	—	466
Off-balance sheet by asset quality (1)	385	2,209	12,618	3,226	18,438
- AQ1-AQ4	315	1,749	12,346	3,226	17,636
- AQ5-AQ8	36	440	272	—	748
- AQ9	1	—	—	—	1
- AQ10	33	20	—	—	53

*Not within audit scope

Note:

(1) AQ bandings are based on Basel PDs.

Key point

- **Asset quality** – Most on and off-balance sheet exposure was in the AQ1-AQ4 bands, which was equivalent to an indicative investment-grade rating of BBB- or better.

Capital and risk management

Credit risk – Banking activities continued

Forbearance

The table below summarises forbearance, Heightened Monitoring and Risk of Credit Loss by sector.

	FI £m	Property £m	Sovereign £m	Other corporate £m	Total £m
2018					
Forbearance (flow)	—	2	—	1	3
Forbearance (stock)	—	3	—	21	24
Heightened Monitoring and Risk of Credit Loss	90	1	16	197	304
2017					
Heightened Monitoring and Risk of Credit Loss	85	9	—	458	552

Loan sector concentration

The table below summarises gross loans to banks and customers (excluding reverse repos) and related credit metrics by sector, on an IAS 39 basis.

	Continuing balance sheet £m
2017	
Selected financial data	
Gross loans - amortised cost to customers (1)	22,780
- Residential mortgages	39
- Other personal	10
- Property and construction	439
- Other	22,292
Customer loan impairment provisions	141
- Property and construction	18
- Other	123
Risk elements in lending	220
- Property and construction	63
- Other	157
Reverse repurchase agreements	38,615
Repurchase agreements	28,362

Note:

(1) Mortgages are reported in sectors other than personal mortgages by certain businesses based on the nature of the relationship with the customer

Credit risk enhancement and mitigation (audited)

The table below summarises exposures of modelled portfolios within the scope of the ECL framework and related credit risk enhancement and mitigation (CREM).

	Gross exposure £bn	ECL £bn	Maximum credit risk Total £bn	Stage 3 £bn	CREM by type Financial (1) £bn	Property £bn	Other (2) £bn	CREM coverage Total £bn	Stage 3 £bn	Exposure post CREM Total £bn	Stage 3 £bn
2018											
Financial assets											
Cash and balances at central banks	11.2	—	11.2	—	—	—	—	—	—	11.2	—
Loans - amortised cost (3)											
Wholesale	9.1	0.1	9.0	0.6	—	0.6	0.4	1.0	0.6	8.0	—
Debt securities	9.8	—	9.8	—	—	—	—	—	—	9.8	—
Total financial assets	30.1	0.1	30.0	0.6	—	0.6	0.4	1.0	0.6	29.0	—
Contingent liabilities and commitments											
Wholesale	18.4	—	18.4	—	0.1	—	0.3	0.4	—	18.0	—
Total off-balance sheet	18.4	—	18.4	—	0.1	—	0.3	0.4	—	18.0	—
Total exposures	48.5	0.1	48.4	0.6	0.1	0.6	0.7	1.4	0.6	47.0	—

Notes:

(1) Financial collateral includes cash and securities collateral.

(2) Other collateral primarily includes guarantees and charges over trade debtors.

(3) The Group holds collateral in respect of individual loans – amortised cost to banks and customers. This collateral includes mortgages over property; charges over business assets such as plant and equipment, inventories and trade debtors; and guarantees of lending from parties other than the borrower. RBS obtains collateral in the form of securities in reverse repurchase agreements. Collateral values are capped at the value of the loan.

Capital and risk management

Credit risk – Banking activities continued

Flow statement (audited)

The ECL flow statement analyses the key elements that drive the movement of ECL and related income statement over the reporting period. The key themes are:

- The flow statements capture the changes in ECL as well as the changes in related financial assets used in determining ECL. Exposures in this section may therefore differ from those reported in other tables in the credit risk section, principally in relation to exposures in Stage 1 and Stage 2. These differences do not have a material ECL impact as they relate to balances at central banks.
- Financial assets presented in the flow statements include treasury liquidity portfolios, comprising balances at central banks and debt securities, as well as loans. Both modelled and non-modelled portfolios are included.
- The flow statement below only captures movements in the NWM continuing business.
- Stage transfers (for example, exposures moving from Stage 1 to Stage 2) – these transfers are a key feature of the ECL movements, with the net re-measurement cost of transitioning to a worse stage being a primary driver of income statement charges for the period (likewise there is an ECL benefit for accounts improving stage).
- Changes in risk parameters – captures the reassessment of the ECL within a given stage, including any ECL overlays and residual income statement gains or losses at the point of write-off or accounting write-down.
- Other (P&L only items) – includes any subsequent changes in the value of written-down assets (for example, fortuitous recoveries) along with other direct write-off items such as direct recovery costs. Note: other (P&L only items) only affects the income statement and does not impact the balance sheet ECL movements.
- Amounts written-off – represent the gross asset written-down against accounts with ECL, including the net asset write-down for debt sale activity.
- There were small amounts of ECL flows from Stage 3 to Stage 1 during the year. This does not however indicate that accounts can return from Stage 3 to Stage 1 directly. On a similar basis, flows from Stage 1 to Stage 3 were observed, however this also included legitimate transfers due to unexpected default events.
- The impact of model changes during 2018 were not material at total level or on the portfolios disclosed below.
- Inter-Group transfers were a feature of the ECL flows during 2018 as a result of ring-fencing related changes, but net to zero effect at a RBS Group-wide level. Preparation for ring-fencing resulted in significant increases in short-term exposures to banks and central governments – reflected as origination within other changes in net exposure in the flow statements.

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m
At 1 January 2018	8,786	2	798	38	352	123	9,936	163
Currency translation and other adjustments	252	(2)	20	1	3	3	275	2
Inter-Group transfers	3,594	1	16	2	374	14	3,984	17
Transfers from Stage 1 to Stage 2	(385)	—	385	—	—	—	—	—
Transfers from Stage 2 to Stage 1	314	28	(314)	(28)	—	—	—	—
Transfers to Stage 3	—	—	(2)	—	2	—	—	—
Transfers from Stage 3	—	—	35	—	(35)	—	—	—
Net re-measurement of ECL on stage transfer		(26)		4		—		(22)
Changes in risk parameters (model inputs)		(5)		1		2		(2)
Other changes in net exposure	19,938	8	(268)	(7)	20	(6)	19,690	(5)
Other (P&L only items - primarily fortuitous recoveries)		(1)		2		(65)		(64)
Income statement (releases)/charges		(24)		—		(69)		(93)
Amounts written-off	—	—	—	—	(69)	(69)	(69)	(69)
Other movements		—		—		—		—
At 31 December 2018	32,499	6	670	11	647	67	33,816	84
Net carrying amount	32,493		659		580		33,732	

Key points

- Stage 3 loans include £166 million (1 January 2018 – £105 million) purchased or originated credit impaired (POCI) assets. As a result, no ECL impairment was held on these positions and subsequent changes in expected recovery are reflected in the income statement. In 2018, a £61 million impairment recovery was recognised on these POCI assets based on the latest assessment of recoverability.
- Stage 1 and Stage 2 changes to risk parameters largely reflected the increase in ECL for economic uncertainty, and a change to the forward-looking modelling approach for point-in-time PDs, where PDs now revert to long-run average after one year rather than five years.
- The release in Stage 1 was driven by a reduction in ECL on exposures transferring from Stage 2, which previously had a lifetime ECL but are now assessed for 12 month ECL.
- The increase in Stage 1 exposure was due to a combination of ring-fencing related transfers and short-term borrowing to governments and central banks which are now in NWM following changes in preparation for ring-fencing.
- The portfolio experienced fortuitous recoveries, reported in other (P&L only items – primarily fortuitous recoveries). This benefited the income statement without affecting ECL.

Capital and risk management

Credit risk – Banking activities continued

Asset quality (audited)

Asset quality analysis is based on internal asset quality ratings which have ranges for the probability of default. Customers are assigned credit grades, based on various credit grading models that reflect the key drivers of default for the customer type. All credit grades across the Group map to both an asset quality scale, used for external financial reporting, and a master grading scale for wholesale exposures used for internal management reporting across portfolios.

The table that follows details the relationship between internal asset quality (AQ) bands and external ratings published by Standard & Poor's (S&P), for illustrative purposes only. This relationship is established by observing S&P's default study statistics, notably the one year default rates for each S&P rating grade. A degree of judgement is required to relate the probability of default ranges associated with the master grading scale to these default rates given that, for example, the S&P published default rates do not increase uniformly by grade and the historical default rate is nil for the highest rating categories.

Internal asset quality band	Probability of default range	Indicative S&P rating
AQ1	0% - 0.034%	AAA to AA
AQ2	0.034% - 0.048%	AA to AA-
AQ3	0.048% - 0.095%	A+ to A
AQ4	0.095% - 0.381%	BBB+ to BBB-
AQ5	0.381% - 1.076%	BB+ to BB
AQ6	1.076% - 2.153%	BB- to B+
AQ7	2.153% - 6.089%	B+ to B
AQ8	6.089% - 17.222%	B- to CCC+
AQ9	17.222% - 100%	CCC to C
AQ10	100%	D

The mapping to the S&P ratings is used by the Group as one of several benchmarks for its wholesale portfolios, depending on customer type and the purpose of the benchmark. The mapping is based on all issuer types rated by S&P. It should therefore be considered illustrative and does not, for instance, indicate that exposures reported against S&P ratings either have been or would be assigned those ratings if assessed by S&P. In addition, the relationship is not relevant for smaller corporate exposures or specialist corporate segments given that S&P does not typically assign ratings to such entities.

Capital and risk management

Credit risk continued

Key IFRS 9 terms and differences to the prior IAS accounting standard and regulatory framework (audited)

Attribute	IFRS 9	IAS 39	Regulatory (CRR)
Default/credit impairment	To determine the risk of a default occurring, management applies a default definition that is consistent with the Basel/regulatory definition of default. Assets that are defaulted are shown as credit impaired. The RBS Group uses 90 days past due as a consistent measure for default across all product classes. The population of credit impaired assets is broadly consistent with IAS 39, though measurement differs because of the application of MES. Assets that were categorised as potential problems with no impairment provision are now categorised as Stage 3.	Default aligned to loss events, all financial assets where an impairment event had taken place – 100% probability of default and an internal asset quality grade of AQ10 – were classed as non-performing. Impaired financial assets were those for which there was objective evidence that the amount or timing of future cash flows had been adversely impacted since initial recognition.	A default shall be considered to have occurred with regard to a particular financial asset when either or both of the following have taken place: – The RBS Group considers that the customer is unlikely to pay its credit obligations without recourse by the institution to actions such as realising security; – The customer is past due more than 90 days.
Probability of default (PD)	PD is the likelihood of default assessed on the prevailing economic conditions at the reporting date (point in time), adjusted to take into account estimates of future economic conditions that are likely to impact the risk of default; it will not equate to a long run average.	Regulatory PDs adjusted to point in time metrics were used in the latent provision calculation.	The likelihood that a customer will fail to make full and timely repayment of credit obligations over a one year time horizon. For Wholesale, PD models reflect losses that would arise through-the-cycle; this represents a long run average view of default levels.
Significant increase in credit risk (SICR)	A framework incorporating both quantitative and qualitative measures aligned to the RBS Group's current risk management framework has been established. Credit deterioration will be a management decision, subject to approval by governing bodies such as the Provisions Committee. The staging assessment requires a definition of when a SICR has occurred; this moves the loss calculation for financial assets from a 12-month horizon to a lifetime horizon. Management has established an approach that is primarily informed by the increase in lifetime probability of default, with additional qualitative measures to account for assets where PD does not move, but a high risk factor is determined	Not applicable.	Not applicable.
Forward-looking and multiple scenarios	The evaluation of future cash flows, the risk of default and impairment loss should take into account expectations of economic changes that are reasonable. More than one outcome should be considered to ensure that the resulting estimation of impairment is not biased towards a particular expectation of economic growth.	Financial asset carrying values based upon the expectation of future cash flows.	Not applicable.

Capital and risk management

Credit risk continued

Key IFRS 9 terms and differences to the prior IAS accounting standard and regulatory framework (audited)

Attribute	IFRS 9	IAS 39	Regulatory (CRR)
Loss given default (LGD)	LGD is a current assessment of the amount that will be recovered in the event of default, taking account of future conditions. It may occasionally equate to the regulatory view albeit with conservatism and downturn assumptions generally removed.	Regulatory LGD values were often used for calculating collective and latent provisions; bespoke LGDs were also used.	An estimate of the amount that will not be recovered in the event of default, plus the cost of debt collection activities and the delay in cash recovery. LGD is a downturn based metric, representing a prudent view of recovery in adverse economic conditions.
Exposure at default (EAD)	Expected balance sheet exposure at default. It differs from the regulatory method as follows: – It includes the effect of amortisation; and – It caps exposure at the contractual limit.	Based on the current drawn balance plus future committed drawdowns.	Models are used to provide estimates of credit facility utilisation at the time of a customer default, recognising that customers may make further drawings on unused credit facilities prior to default or that exposures may increase due to market movements. EAD cannot be lower than the reported balance sheet, but can be reduced by a legally enforceable netting agreement.
Date of initial recognition	The reference date used to assess a significant increase in credit risk is as follows. Term lending: the date the facility became available to the customer. Wholesale revolving products: the date of the last substantive credit review (typically annual) or, if later, the date facility became available to the customer. Cards: the account opening date or, if later, the date the card was subject to a regular three year review or the date of any subsequent limit increases. Current accounts/overdrafts: the account opening date or, if later, the date of initial granting of overdraft facility or of limit increases.	Not applicable for impairment but defined as the date when the entity becomes a party to the contractual provisions of the instrument.	Not applicable.
Modification	A modification occurs when the contractual cash flows of a financial asset are renegotiated or otherwise modified and the renegotiation or modification does not result in derecognition. A modification requires immediate recognition in the income statement of any impact on the carrying value and effective interest rate (EIR) or examples of modification events include forbearance and distressed restructuring. The financial impact is recognised in the income statement as an impairment release/(loss).	Modification was not separately defined but accounting impact arose as an EIR adjustment on changes that were not derecognition or impairment events.	Not applicable.

Capital and risk management

Market risk

The Group is exposed to traded market risk through its trading activities and to non-traded market risk through its banking activities. Traded and non-traded market risk exposures are managed separately. As a result, each type of market risk is discussed separately. The traded market risk section begins below. The non-traded market risk section begins on page 42.

Pension-related activities also give rise to market risk. Refer to page 45 for more information on risk related to pensions.

Traded market risk

The NWM Group's traded market risk disclosures should be read in conjunction with the RBS Group's Pillar 3 Report 2018.

Definition

Traded market risk is the risk arising from changes in fair value on positions, assets, liabilities or commitments in trading portfolios as a result of fluctuations in market prices.

The following disclosures in this section are audited:

- Internal value-at-risk (VaR).

Sources of risk

Traded market risk mainly arises from the Group's trading activities. These activities provide a range of financing, risk management and investment services to clients – including corporations and financial institutions – around the world. From a market risk perspective activities are focused on rates; currencies; securitised products; and traded credit.

The Group undertakes transactions in financial instruments including debt securities, as well as securities financing and derivatives.

The key categories of traded market risk are interest rate risk, credit spread risk and foreign currency price risk.

Trading activities may also give rise to counterparty credit risk. For further detail, refer to the Credit risk section on page 23.

Key developments in 2018

- Geopolitical risk resulted in periods of market volatility during the year. This mainly related to threats of a trade war between China and the US, elections in Italy and negotiations on a Brexit deal. European interest rates remained at low levels, although the Bank of England and US Federal Reserve continued raising rates.
- Traded VaR fluctuated throughout 2018, reflecting political developments and geopolitical risk, but remained broadly unchanged on an average basis compared to 2017.
- Ring-fencing implementation had limited impact from a traded market risk viewpoint as the vast majority of the risk already resided in the Group as of the previous year.

Risk governance

Responsibility for identifying, measuring, monitoring and controlling market risk arising from trading activities lies with the relevant trading business. Oversight is provided by the Market Risk function. Traded market risk positions are reported monthly to the Executive Risk Committee and quarterly to the Board Risk Committee. Market risk policy statements set out the governance and risk management framework.

Risk appetite

The Group's qualitative appetite for traded market risk is set out in the traded market risk appetite statement.

Quantitative appetite is expressed in terms of exposure limits.

The limit framework at Group level comprises VaR and stressed value-at-risk (SVaR). More details on these are provided on the following pages.

The limit framework at trading unit level also comprises additional metrics specific to the market risk exposures within its scope. These additional metrics aim to control various risk dimensions such as product type, exposure size, aged inventory, currency and tenor. For each trading business, a document known as a dealing authority compiles details of all applicable limits and trading restrictions.

The limits are reviewed to reflect changes in risk appetite, business plans, portfolio composition and the market and economic environments. To ensure approved limits are not breached and that the Group remains within its risk appetite, triggers at Group and lower levels have been set such that if exposures exceed a specified level, action plans are developed by the relevant business and the Market Risk function and implemented.

For more detail on risk appetite, refer to page 13.

Risk controls

For information on risk controls, refer to page 13.

Risk monitoring and mitigation

Traded market risk is identified and assessed by gathering, analysing, monitoring and reporting market risk information at desk, business and Group-wide levels. Industry expertise, continued system developments and techniques such as stress testing are also used to enhance the effectiveness of the identification and assessment of all material market risks.

Traded market risk exposures are monitored against limits and analysed daily by market risk reporting and control functions. A daily report summarising the position of exposures against limits at Group, business and desk levels is provided to senior business and market risk managers.

Limit reporting is supplemented with regulatory capital and stress testing information as well as ad hoc reporting.

A risk review of trading businesses is undertaken weekly with senior risk and front office staff. This includes a review of profit and loss drivers, notable position concentrations and other positions of concern.

Capital and risk management

Traded market risk continued

Business profit and loss performance is monitored automatically through loss triggers which, if breached, require a remedial action plan to be agreed between the Market Risk function and the business. The loss triggers are set using both a fall-from-peak approach and an absolute loss level. In addition, regular updates on traded market risk positions are provided to the Group's Executive Risk Committee and Board Risk Committee.

Risk measurement (audited)

The Group uses VaR, SVaR and the incremental risk charge to measure traded market risk. Risks that are not adequately captured by VaR or SVaR are captured by the risks not in VaR (RNIV) framework to ensure that the Group is adequately capitalised for market risk. In addition, stress testing is used to identify any vulnerabilities and potential losses in excess of VaR and SVaR.

The key inputs into these measurement methods are market data and risk factor sensitivities. Sensitivities refer to the changes in trade or portfolio value that result from small changes in market parameters that are subject to the market risk limit framework. Revaluation ladders are used in place of sensitivities to capture the impact of large moves in risk factors or the joint impact of two risk factors.

These methods have been designed to capture correlation effects and allow the Group to form an aggregated view of its traded market risk across risk types, markets and business lines while also taking into account the characteristics of each risk type.

One-day 99% traded internal VaR (audited)

The table below analyses 1-day 99% internal VaR for the trading portfolios of NWM Plc and NWMSI, segregated by type of market risk exposure.

	2018				2017			
	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
NWM Plc								
Interest rate	13.9	26.6	8.8	11.4	13.5	20.8	8.6	15.0
Credit spread	10.7	23.5	6.9	7.2	11.8	18.9	8.5	16.4
Currency	3.1	7.7	1.3	5.3	4.8	9.8	2.4	3.4
Equity	0.8	1.6	0.3	0.8	1.2	2.1	0.4	0.4
Commodity	0.3	0.9	—	0.1	0.3	1.4	—	0.2
Diversification (1)	(10.5)			(6.3)	(12.6)			(15.4)
Total	18.2	32.5	11.4	18.4	19.0	29.2	13.3	20.1
	2018				2017			
	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
NWMSI								
Interest rate	1.9	3.2	1.0	2.3	3.3	6.0	1.6	1.6
Credit spread	0.9	2.5	0.3	1.8	0.7	3.4	0.5	0.5
Commodity	0.1	0.3	—	—	0.1	0.4	—	—
Diversification (1)	(0.5)			(1.3)	(0.5)			(0.2)
Total	2.3	3.6	1.2	2.8	3.6	6.5	1.8	1.9

Note:

(1) The Group benefits from diversification since it reduces risk by allocating positions across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

Key points (audited)

NWM Plc

- Although traded VaR fluctuated throughout 2018 as explained earlier, it remained broadly unchanged on both an average and period-end basis.
- VAR peaked in January, May and July, largely related to bond syndication activity and, in the case of January, long euro rates.

Value-at-risk

For internal risk management purposes, VaR assumes a time horizon of one trading day and a confidence level of 99%.

The internal VaR model – which captures all trading book positions including those products approved by the regulator – is based on a historical simulation, utilising market data from the previous 500 days on an equally-weighted basis.

The model also captures the potential impact of: interest rate risk; credit spread risk; foreign currency price risk; equity price risk; and commodity price risk.

When simulating potential movements in such risk factors, a combination of absolute, relative and rescaled returns is used.

Testing of the performance and adequacy of the VaR model is done on a regular basis through the following processes:

- Back-testing – Internal and regulatory back-testing is conducted on a daily basis. (For information on internal back-testing, refer to page 41).
- Ongoing model validation – VaR model performance is assessed both regularly and on an ad-hoc basis if market conditions or portfolio profile change significantly.
- Model Risk Management review – As part of the model lifecycle, all risk models (including the VaR model) are independently reviewed to ensure the model is still fit for purpose given current market conditions and portfolio profile.

NWMSI

- The decrease in traded VaR on an average basis was mainly driven by the US Rates business.

Capital and risk management

Traded market risk continued

VaR back-testing

The table below shows regulatory back-testing exceptions for the 250-business-day period to 31 December 2018 for one-day 99% traded regulatory VaR compared with Actual and Hypo P&L for the legal entity approved by the PRA.

2018	Back-testing exceptions	
	Actual	Hypo
NWM Plc	3	5

Key points

- Statistically RBS Group would expect to see back-testing exceptions 1% of the time over a period of 250 business days. A VaR model recording four or fewer exceptions in a continuous 250-day period is regarded as satisfactory. A model recording five or more exceptions is regarded as having potential issues regarding its quality or accuracy.
- In NWM Plc, the back-testing exceptions in May and December 2018 were mainly driven by losses in the Rates portfolio as a result of adverse market moves in interest rates and inflation. The exception in November 2018 was mainly driven by a sterling inflation curve re-mark in the Rates portfolio.

The table below shows internal back-testing exceptions for the 250-business-day period to 31 December 2018 for one-day 99% traded internal VaR compared with Actual and Hypo P&L for the major NatWest Markets businesses.

2018	Back-testing exceptions	
	Actual	Hypo
Rates	4	8
Currencies	—	4
Credit	—	—

Key points

- Statistically RBS Group would expect to see back-testing exceptions 1% of the time over the 250 day period.
- The exceptions in the Rates business were mainly driven by the increased volatility connected with large market movements due to political uncertainty in Italy and Spain.
- The exceptions in the Currencies business were mainly due to market movements.

Stressed VaR (SVaR)

As with VaR, the SVaR methodology produces estimates of the potential change in the market value of a portfolio, over a specified time horizon, at a given confidence level. SVaR is a VaR-based measure using historical data from a one-year period of stressed market conditions. A simulation of 99% VaR is run on the current portfolio for each 250-day period from 2005 to the current VaR date, moving forward one day at a time. The SVaR is the worst VaR outcome of the simulated results.

This is in contrast with VaR, which is based on a rolling 500-day historical data set. A time horizon of ten trading days is assumed with a confidence level of 99%. The Group's internal traded SVaR model captures all trading book positions.

The table below analyses 10-day 99% internal SVaR for the trading portfolios of NWM Plc and NWMSI.

	Period end 2018 £m	Period end 2017 £m
NWM Plc	144	153
NWMSI	32	18

Key points

- In NWM Plc, traded SVaR fluctuated throughout 2018. Period-end SVaR remained at a similar level year-on-year.
- In NWMSI, the risk profile remained stable throughout the year, with the period-end increase having no material impact on the Group as a whole.

Capital and risk management

Traded market risk continued

Risks not in VaR (RNIVs)

The RNIV framework is used to identify and quantify market risks that are not fully captured by the internal VaR and SVaR models. RNIV calculations form an integral part of ongoing model and data improvement efforts to capture all market risks in scope for model approval in VaR and SVaR.

Stress testing

For information on stress testing, refer to page 14.

Incremental risk charge (IRC)

The IRC model quantifies the impact of rating migration and default events on the market value of instruments with embedded credit risk (in particular, bonds and credit default swaps) held in the trading book. It further captures basis risk between different instruments, maturities and reference entities.

Model validation

The Group uses a variety of models to manage and measure market risk. These include pricing models (used for valuation of positions) and risk models (for risk measurement and capital calculation purposes). They are developed and approved in NatWest Markets, with material models subject to independent review by Model Risk Management.

For further detail on the independent model validation carried out by Model Risk Management refer to page 14. Information relating to pricing and market risk models is presented below.

Pricing models

Pricing models are developed by a dedicated first line team, in conjunction with the trading desk. The models are used to value positions for which prices are not directly observable as well as for the risk management of the portfolio. Any pricing models that are used as the basis for valuing portfolios and records are subject to approval and oversight by asset-level modelled product review committees. These committees comprise representatives of the trading, finance, market risk, model development and model review functions. Approval requires review and approval by these stakeholders as well as Model Risk Management.

The review process includes the following steps:

- The committees prioritise models for review by Model Risk Management, considering the materiality of the risk booked against the model and an assessment of the degree of model risk that is the valuation uncertainty arising from the choice of modelling assumptions.
- Model Risk Management quantifies the model risk, which may include comparing the model outputs with those of alternative models developed by Model Risk Management.
- The sensitivities derived from the pricing models are validated.
- The conclusions of the review are used to inform risk limits and by the Finance function to inform model reserves.

Risk models

All model changes are approved through model governance committees at franchise level. Changes to existing models are subject to Model Risk Management review. The Group follows regulatory guidance for assessing the materiality of extensions and changes to the internal model approach for market risk.

In addition to Model Risk Management's independent oversight – which provides additional assurance that the Group holds appropriate capital for the market risk to which it is exposed – the model testing team monitors the model performance for market risk through back-testing and other processes.

Non-traded market risk

Definition

Non-traded market risk is the risk to the value of assets or liabilities outside the trading book, or the risk to income, that arises from changes in market prices such as interest rates, foreign exchange rates and equity prices, or from changes in managed rates. The following disclosures in this section are audited:

- Internal banking book VaR.

Sources of risk

The key sources of non-traded market risk for the Group are interest rate risk, credit spread risk and foreign exchange risk.

Interest rate risk

Non-traded interest rate risk (NTIRR) arises from non-match-funded positions, capital hedges and portfolios held for liquidity purposes. When aggregated, these products form portfolios of assets and liabilities with varying degrees of sensitivity to changes in market interest rates. Mismatches can give rise to volatility in net interest income as interest rates vary. NTIRR comprises three primary risk types: gap risk, basis risk and option risk.

Credit spread risk

Credit spread risk arises from the potential adverse economic impact of a change in the spread between bond yields and swap rates, where the bond portfolios are accounted at fair value through equity.

Foreign exchange risk

Non-traded foreign exchange risk arises from two main sources:

- Structural foreign exchange risk – arises from the capital deployed in foreign subsidiaries, joint arrangements and related currency funding where it differs from sterling.
- Non-trading book foreign exchange risk – arises from customer transactions and profits and losses that are in a currency other than the functional currency of the transacting operation.

Key developments in 2018

- Compliance with the UK's ring-fencing regulations resulted in responsibility for management of the Group's non-traded market risk being separated from the ring-fenced bank.
- The Group's non-traded market risk profile was defined ahead of ring-fencing implementation based on projections regarding the overall shape of the banking portfolio. This included structural interest rate risk arising from a mismatch between assets and liabilities, and liquid assets held for regulatory purposes based on the Group's Individual Liquidity Adequacy Assessment.
- A foreign exchange hedging programme was initiated in order to mitigate the risk to the value of CET1 capital denominated in euros and US dollars. The use of foreign exchange options allows for management of the CET1 ratio in the event of currency fluctuation relative to sterling.
- Compliance with ring-fencing regulations resulted in a split of equity structural hedges between NatWest Markets and NatWest Holdings. A notional £6 billion amount of this equity hedge, bearing an outright interest rate sensitivity of £2.5 million per basis point, was allocated to NWM Plc in 2018.
- Risk transfers included loan assets deemed ineligible to remain inside the ring-fenced bank, notably the LOBO (lender-option/borrower-option) portfolio, and legacy Capital Resolution equity positions.

Risk governance

Responsibility for identifying, measuring, monitoring and controlling market risk arising from non-trading activities lies with the relevant business. Oversight is provided by the Group's Market Risk function, which reports into the Chief Risk Officer.

Capital and risk management

Non-traded market risk continued

Risk positions are reported monthly to the Group's Executive Risk Committee and quarterly to the Group's Board Risk Committee, as well as to the Group's Asset & Liability Management Committee (ALCo) where the pre-mentioned sources of risk are reported.

Market risk policy statements set out the governance and risk management framework.

Risk appetite

The Group's qualitative appetite is set out in the non-traded market risk appetite statement. Quantitative appetite is expressed in terms of exposure limits. The limit framework at the Group level comprises (VaR), (SVaR), sensitivity and stress limits, and earnings-at-risk limits. To ensure limits are not breached and that the Group remains within its risk appetite, triggers at the Group and lower levels have been set such that if exposures exceed a specified level, action plans are developed by the business, the Market Risk function and Finance and implemented. Limits are reviewed regularly to reflect changes in risk appetite, business plans, portfolio composition and the external environment. For further information on risk appetite, refer to page 13.

Risk controls

For information on risk controls, refer to page 13.

Risk monitoring and mitigation

Interest rate risk

NTIRR factors are grouped into the following categories:

- Gap risk – arises from the timing of rate changes in non-trading book instruments. The extent of gap risk depends on whether changes to the term structure of interest rates occur consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk).
- Basis risk – captures the impact of relative changes in interest rates for financial instruments that have similar tenors but are priced using different interest rate indices, or on the same interest rate indices but with different tenors.
- Option risk – arises from option derivative positions or from optional elements embedded in assets, liabilities and/or off-balance sheet items, where the Group or its customer can alter the level and timing of their cash flows.

To manage exposures within appetite, the Group aggregates its interest rate positions and hedges these externally using cash and derivatives (primarily interest rate swaps).

Credit spread risk

The Group's bond portfolios primarily comprise high-quality securities maintained as a liquidity buffer to ensure the Group can continue to meet its obligations in the event that access to wholesale funding markets is restricted. Additionally other high-quality bond portfolios are held for collateral purposes and to support payment systems. Credit spread risk is monitored daily through sensitivities and VaR measures. The dealing authorities in place for the bond portfolios further mitigate the risk by imposing constraints by duration, asset class and credit rating. Exposures and limit utilisations are reported to senior management on a daily basis.

Foreign exchange risk

The only material non-traded open currency positions are the structural foreign exchange exposures arising from investments in foreign subsidiaries, branches and associates and their related currency funding. These exposures are assessed and managed by the Group's Treasury to predefined risk appetite levels under delegated authority from the ALCo. Gains or losses arising from the retranslation of net investments in overseas operations are recognised in equity reserves and reduce the sensitivity of capital ratios to foreign exchange rate movements primarily arising from the retranslation of non-sterling-denominated RWAs. Sensitivity is minimised where, for a given currency, the ratio of the structural open position to RWAs equals the Group's CET1 ratio. The sensitivity of this ratio to exchange rates is monitored monthly and reported to the Group ALCo at least quarterly. Foreign exchange exposures arising from customer transactions are sold down by businesses on a regular basis in line with RBS Group policy.

Capital and risk management

Non-traded market risk continued

Risk measurement (audited)

The market risk exposures arising as a result of the Group's banking activities are measured using a combination of value-based metrics (VaR and sensitivities) and earnings-based metrics. The following table presents one-day internal banking book VaR at a 99% confidence level, split by risk type.

	2018 Period end £m	2017 Period end £m
Interest rate	5.0	27.1
Credit spread	8.8	50.1
Foreign exchange rate	14.6	—
Equity risk	5.6	—
Pipeline risk	—	0.7
Diversification (1)	(15.4)	(16.7)
Total	18.6	61.2

Note:

- (1) The Group benefits from diversification across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR

Key point

- The period-end position at 31 December 2017 is presented for information purposes only. It reflects the form of the Group (formerly RBS plc) prior to the implementation of ring-fencing related transfers during 2018 and a direct comparison is not relevant.

Foreign exchange risk (audited)

The table below shows structural foreign currency exposures.

	Net investments in foreign operations £m	Net investment hedges £m	Structural foreign currency exposures £m	Economic hedges £m	Residual structural foreign currency exposures (1) £m
31 December 2018					
US dollar	403	—	403	(403)	—
Euro	21	—	21	—	21
Swiss franc	472	(438)	34	—	34
Other non-sterling	597	(273)	324	—	324
	1,493	(711)	782	(403)	379
31 December 2017					
US dollar	623	—	623	—	623
Euro	5,315	(195)	5,120	—	5,120
Swiss franc	448	(419)	29	—	29
Other non-sterling	908	(484)	424	—	424
	7,294	(1,098)	6,196	—	6,196

Note:

- (1) The residual structural FX exposure represented the sum of the net asset value (NAV) of subsidiaries and branches, together with any offsetting hedges against the local currency NAV valuations

Key point

- The period-end position at 31 December 2017 is presented for information purposes only. It reflects the form of the Group (formerly RBS plc) prior to the implementation of ring-fencing related transfers during 2018 and a direct comparison is not relevant.

Capital and risk management

Pension risk

Definition

Pension obligation risk is the risk to the Group caused by its contractual or other liabilities to, or with respect to, a pension scheme (whether established for its employees or those of a related company or otherwise). It is also the risk that the Group will make payments or other contributions to, or with respect to, a pension scheme because of a moral obligation or because the Group considers that it needs to do so for some other reason.

Sources of risk

The Group has exposure to pension risk through its defined benefit schemes worldwide. The two largest Group schemes are the AA and the NatWest Markets sections of The Royal Bank of Scotland Group Pension Fund with a combined £1.3 billion of assets and £0.9 billion of liabilities as at 31 December 2018 (2017 – £1.2 billion assets and £0.9 billion liabilities). Further detail on the Group's pension obligations, including sensitivities to the main risk factors, can be found in Note 5 on the accounts.

Pension scheme liabilities vary with changes in long-term interest rates and inflation as well as with pensionable salaries, the longevity of scheme members and legislation. Pension scheme assets vary with changes in interest rates, inflation expectations, credit spreads, exchange rates, and equity and property prices. The Group is exposed to the risk that the schemes' assets, together with future returns and additional future contributions, are insufficient to meet liabilities as they fall due. In such circumstances, the Group could be obliged (or might choose) to make additional contributions to the schemes, or be required to hold additional capital to mitigate this risk.

Key developments in 2018

- The Group was stood up as a distinct legal entity outside of the ring-fenced NatWest Holdings Limited group. On 1 November, NatWest Markets Plc ceased to be a participating employer of the Main Section.
- The new NatWest Markets section of the RBS Group Pension Fund was created on 1 November, to which the liabilities and corresponding share of assets in relation to Group members were transferred.
- The Pension Committee, as a sub-committee of the Asset & Liability Committee, was created in July to provide a governance framework for all Group pension schemes.

Risk governance

The Pension Committee, chaired by the Chief Financial Officer, acts as a sub-committee of the Asset & Liability Committee and formulates the Group view of pension risk. The Pension Committee is a key component of the Group's approach to managing pension risk and it reviews and monitors risk management, asset strategy and financing issues on behalf of the Group. Together with the RBS Group, it also considers investment strategy proposals from the Trustee.

For further information on Risk governance, refer to page 12.

Risk appetite

The Group maintains an independent view of the risk inherent in its pension funds, with an associated risk appetite and defined metrics against which risk is measured.

Risk controls

A pension risk policy which sits within the Group policy framework is also in place and is subject to associated framework controls.

Risk monitoring and measurement

The Group undertakes stress tests and scenario analyses on its material defined benefit pension schemes each year. These tests are also used to satisfy the requests of regulatory bodies such as the Bank of England. The stress testing framework includes pension risk capital calculations for the purposes of the Internal Capital Adequacy Assessment Process as well as additional stress tests for a number of internal management purposes.

The results of the stress tests and their consequential impact on the

Group's balance sheet, income statement and capital position are incorporated into the Group's and the overall RBS Group stress test results.

Risk mitigation

The trustee has taken measures to mitigate inflation and interest rate risks, both by investing in suitable financial assets and by entering into inflation and interest rate swaps. The AA and the NatWest Markets sections of the RBS Group Pension Fund also use derivatives to manage the allocation of the portfolio to different asset classes and to manage risk within asset classes.

Compliance & conduct risk

Definition

Compliance risk is the risk that the behaviour of the Group towards customers fails to comply with laws, regulations, rules, standards and codes of conduct. Such a failure may lead to breaches of regulatory requirements, organisational standards or customer expectations and could result in legal or regulatory sanctions, material financial loss or reputational damage.

Conduct risk is the risk that the conduct of the Group and its subsidiaries and its staff towards customers – or in the markets in which it operates – leads to unfair or inappropriate customer outcomes and results in reputational damage, financial loss or both.

Sources of risk

Compliance and conduct risks exist across all stages of the Group's relationships with its customers and arise from a variety of activities including product design, marketing and sales, complaint handling, staff training, and handling of confidential insider information. As set out in Note 27 on the accounts, the RBS Group and certain members of staff are party to legal proceedings and are subject to investigation and other regulatory action in the UK, the US and other jurisdictions.

Key developments in 2018

- An enhanced compliance and conduct risk framework was developed, setting minimum standards for the management and measurement of compliance and conduct risks across the RBS Group.
- Enhanced product monitoring and reporting was introduced.
- Controls, systems and processes were revised to ensure compliance with the UK's ring-fencing rules.

Risk governance

The RBS Group defines appropriate standards of compliance and conduct and ensures adherence to those standards through its risk management framework.

Risk appetite

Risk appetite for compliance and conduct risks is set at RBS Group Board level. Risk appetite statements articulate the levels of risk that legal entities, franchises and functions work within when pursuing their strategic objectives and business plans.

Risk controls

The RBS Group operates a range of controls to ensure its business is conducted in accordance with legal and regulatory requirements, as well as delivering good customer outcomes. A suite of policies addressing compliance and conduct risks set appropriate standards across the RBS Group. Examples of these include the Complaints Management Policy, Client Assets & Money Policy, and Product Lifecycle Policy, as well as policies relating to cross-border activities and market abuse. Continuous monitoring and, targeted assurance is undertaken, as appropriate.

Risk monitoring and measurement

Compliance and conduct risks are measured and managed through continuous assessment and reporting to the RBS Group's senior risk committees and at RBS Group Board level.

The compliance and conduct risk framework facilitates the consistent monitoring and measurement of compliance with laws and regulations and the delivery of consistently good customer outcomes.

Capital and risk management

Compliance & conduct risk continued

The first line of defence is responsible for effective risk identification, reporting and monitoring, with oversight, challenge and review by the second line. Compliance and conduct risk management is also integrated into the RBS Group's strategic planning cycle.

Risk mitigation

Activity to mitigate the most-material compliance and conduct risks is carried out across the RBS Group with specific areas of focus in the customer-facing franchises and legal entities. Examples of mitigation include consideration of customer needs in business and product planning, targeted training, complaints management, as well as independent assurance activity. Internal policies help support a strong customer focus across the RBS Group. Independent assessments of compliance with applicable regulations are also carried out at Group level.

Financial crime

Definition

Financial crime risk is the risk presented by criminal activity in the form of money laundering, terrorist financing, bribery and corruption, sanctions and tax evasion. It does not include fraud risk management.

Sources of risk

Financial crime risk may be presented if the Group's employees, customers or third parties undertake or facilitate financial crime, or if the Group's products or services are used to facilitate such crime. Financial crime risk is an inherent risk across all of the Group's lines of business.

Key developments in 2018

- In March 2018, the Federal Reserve Board terminated a Cease & Desist Order originally imposed in July 2011 for financial crime compliance weaknesses identified across RBS Group's US businesses and concerns about the level of oversight that the RBS Group Board of Directors had over large and complex US operations. The termination of the Order followed a multi-year programme of work to establish an enhanced governance and oversight framework, risk management programme and compliance programme.
- In October 2018, the Federal Reserve Board terminated a Cease & Desist Order originally imposed in December 2013. The Order, which related to RBS Group and RBS plc's historical compliance with Office of Foreign Assets Control (OFAC) economic sanctions regulations, was terminated following a multi-year programme of work to establish a robust, sustainable OFAC Sanctions compliance framework.
- While the financial crime governance framework was strengthened during 2018 – along with the introduction of enhanced control effectiveness assurance processes, enhancements to existing risk assessment models, the introduction of a new Anti-Tax Evasion risk assessment; and improved monitoring controls and enhanced investigation processes – the journey of improvement continues.

Risk governance

Financial crime risk is principally governed through the Financial Crime Risk Executive Committee, which is chaired by the Chief Financial Crime Officer. The committee reviews and, where appropriate, escalates material risks and issues to the RBS Group Executive Risk Committee and the Group Board Risk Committee.

Risk appetite

The Group has no appetite to operate in an environment where systems and controls do not enable the Group to identify, assess, monitor, manage and mitigate financial crime risk. The Group's systems and controls must be comprehensive and proportionate to the nature, scale and complexity of its businesses. The Group has no tolerance to systematically or repeatedly breach relevant financial crime regulations and laws.

Risk mitigation

Through the financial crime framework, the Group employs relevant policies, systems, processes and controls to mitigate financial crime risk.

This would include the use of dedicated screening and monitoring controls to identify people, organisations, transactions and behaviours which might require further investigation or other actions. The Group ensures that centralised expertise is available to detect and disrupt threats to the Group and its customers. Intelligence is shared with law enforcement, regulators and government bodies in order to strengthen national and international defences against those who would misuse the financial system for criminal motives.

Risk controls

The Group operates a framework of preventative and detective controls designed to ensure the Group mitigates the risk that it could facilitate financial crime. These controls are supported by a suite of policies, procedures and detailed instructions to ensure they operate effectively.

Risk monitoring and measurement

Financial crime risks are identified and reported through continuous risk management and regular monthly reporting to RBS Group's senior risk committees and the Board. Quantitative and qualitative data is reviewed and assessed to measure whether financial crime risk is within the Group's risk appetite.

Operational risk

Definition

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or external events. It arises from day-to-day operations and is relevant to every aspect of the business.

Sources of risk

Operational risk may arise from a failure to manage operations, systems, transactions and assets appropriately. This can take the form of human error, an inability to deliver change adequately or on time, the non-availability of technology services, or the loss of customer data. Fraud and theft – as well as the increasing threat of cyber attacks – are sources of operational risk, as is the impact of natural and man-made disasters. Operational risk can also arise from a failure to account for changes in law or regulations or to take appropriate measures to protect assets.

Key developments in 2018

- The Group continued work on embedding its enhanced operational risk practices, improving links between risk appetite and risk exposure and building a more robust control environment, alongside implementing changes required for fencing compliance under ICB.

Risk governance

A strong operational risk management function is vital to support the Group's ambitions to serve its customers better. Improved management of operational risk against defined appetite directly supports the strategic risk objective of improving stakeholder confidence and is vital for stability and reputational integrity.

The operational risk function, which is the second line of defence, delivers a robust operational risk management approach and culture across the Group.

The operational risk function is responsible for the oversight of both execution of the operational risk management framework, and the effective management of operational risks across the Group.

The Operational Risk Executive Committee, the RBS Group-wide committee for operational risk, is attended by Legal Entity Heads of Operational Risk. This committee is responsible for reviewing operational risk exposure; identifying and assessing both current and emerging material operational risks; reviewing and monitoring the operational risk profile; and reviewing and approving material operational risk policy changes.

Risk appetite

Operational risk appetite supports effective management of material operational risks. It expresses the level and types of operational risks the Group is willing to accept to achieve its strategic objectives and business plans.

Capital and risk management

Operational risk continued

The operational risk appetite statement encompasses the full range of operational risks faced by the Group's legal entities, franchises and functions. A subset of the most material risk appetite measures are defined as Board Risk Measures, which are those that, should the limit be breached, would impact on the ability to achieve business plans and threaten stakeholder confidence. These are also set at legal entity level.

Risk controls

The Control Environment Certification (CEC) process is a half yearly self-assessment by the RBS Group customer-facing franchises and business units. It gives an assessment on the adequacy and effectiveness of the internal control environment in a consistent and comparable manner. In line with ring-fencing requirements, from H2 2018 certificates were also produced for the NatWest Markets (NWM) Plc legal entity.

CEC covers material risks and the key controls that underpin them, including financial, operational and compliance controls, as well as supporting risk management frameworks. The CEC outcomes, including forward-looking assessments for the next two half-yearly cycles and progress on control environment improvements, are reported to the Group Board, Group Audit Committee and Board Risk Committee, alongside legal entity governance for NWM Plc. They are also shared with external auditors.

The CEC process helps to ensure compliance with the RBS Group Policy Framework including internal control over financial reporting.

Risk monitoring and measurement

Risk and control assessments are used across all business areas and support functions to identify and assess material operational and conduct risks and key controls. To support identification of risk concentrations, all risks and controls are mapped to a Risk Directory. Risk assessments are refreshed at least annually to ensure they remain relevant and capture any emerging risks, with associated trigger processes to ensure risks are reassessed at key periods of change.

The process is designed to confirm that risks are effectively managed and prioritised in line with risk appetite. Controls are tested at the appropriate frequency to verify that they remain fit-for-purpose and operate effectively.

The Group uses the standardised approach to calculate its Pillar 1 operational risk capital requirement. This is based on multiplying three years' average historical gross income by coefficients set by the regulator based on business line. As part of the wider Internal Capital Adequacy Assessment Process an operational risk economic capital model is used to assess Pillar 2A, which is a risk-sensitive add-on to Pillar 1. The model uses historical loss data (internal and external) and forward-looking scenario analysis that is provided by operational risk to provide a risk-sensitive view of the Group's P2A capital requirement. Refer to the Capital, liquidity and funding risk section for operational risk capital requirement figures.

Scenario analysis is used to assess how extreme but plausible operational risks will affect the Group. It provides a forward-looking basis for evaluating and managing operational risk exposures.

Event and loss data management

The operational risk event and loss data management process ensures operational risk loss events are captured and recorded in line with defined criteria. Loss data is used for regulatory and industry reporting and is included in capital modelling when calculating economic capital for operational risk. The most serious events are escalated in a simple, standardised process to all senior management, by way of a Group Notifiable Event Process.

All financial impacts and recoveries associated with an operational risk event are reported against their financial accounting date. A single event can result in multiple losses (or recoveries) that may take time to crystallise. Losses and recoveries with a financial accounting date in 2018 may relate to events that occurred, or were identified in, prior years. The Group purchases insurance against specific losses and to comply with statutory or contractual requirements.

Operational resilience

The Group manages and monitors operational resilience through its risk and control assessments methodology. As challenges to operational resilience become more demanding, given a hostile cyber environment and a greater focus on serving customers through digital platforms, the Group is working with supervisory authorities in the UK to ensure the provision of its products and services can be maintained regardless of the cause of disruption.

This is underpinned by setting, monitoring and testing tolerances for key business services, which define the amount of disruption that could be tolerated

Risk mitigation

Risks are mitigated by applying key preventative and detective controls. Risks outside of appetite will have remediation plans that are subject to governance and oversight. These are integral steps in the risk assessment methodology to determine residual risk exposure. Control owners are accountable for the design, execution, performance and maintenance of key controls.

Key controls are regularly assessed for adequacy and tested for effectiveness. The results are monitored and, where a material change in performance is identified, the associated risk is re-evaluated.

Business risk

Definition

Business risk is the risk that the Group does not have a strategy that is sufficiently well defined to provide clarity on the Group's long-term ambitions to key internal and external stakeholders, or that it is not able to execute its chosen strategy as communicated to the market, regulators and other key stakeholders. The risk is that the Group does not deliver its expected business performance which could give rise to a deterioration in stakeholder trust and confidence and/or a breach of regulatory thresholds. The Group may not be able to execute its chosen strategy if there are material changes to the Group's internal or external operating environment.

Sources of risk

Business risk arises as a result of the Group's exposure to the macro-economy (including economic and political factors), the competitive environment, regulatory and technological changes. In addition, internal factors such as the ability to deliver complex change, volatility in sales volumes, input costs, and other operational risks affect the bank's ability to execute its chosen strategic business plan as intended and thus contribute to business risk.

Key developments in 2018

- In preparation for ring-fencing under ICB the RBS Group has completed a business re-structure. The UK Personal & Business Banking and Commercial Banking business of NatWest Markets Plc (formerly RBS plc renamed in 2018) were transferred to Royal Bank of Scotland plc and NatWest Bank Plc.
- RBS Group also restructured the NatWest Markets Plc (former RBS plc) capital structure. The shares in NatWest Holdings Limited, which owns the ring-fenced sub-group, were distributed to RBS Group. This separated the ring-fenced sub-group from the non-ring-fenced entities, as required by ring-fencing legislation. RBS Group also transferred the customer interest rate and foreign exchange derivatives business of National Westminster Bank Plc to NatWest Markets Plc.
- NatWest Markets Plc reached a civil settlement in principle with the US Department of Justice in relation its investigation into RBS's issuance and underwriting of US Residential Mortgage Backed Securities (RMBS) between 2005 and 2007, resulting in a £1.0 billion additional provision.

Risk governance

The Board has ultimate responsibility for business risk and for approving strategic plans, initiatives and changes to strategic direction.

Capital and risk management

Business risk continued

The Group's strategic planning process is managed by Strategy and Corporate Development. The Risk and Finance functions are key contributors to strategic planning.

Responsibility for the day-to-day management of business risk lies primarily with the franchise, with oversight by the Finance function. The franchise is responsible for delivery of their business plans and the management of such factors as pricing, sales volumes, marketing expenditure and other factors that can introduce volatility into earnings.

Risk appetite

Risk Appetite defines the level and types of risk the Group is willing to accept in order to achieve its strategic objectives and business plans. The Group articulates its appetite for business risk through the implementation of qualitative risk appetite statements and quantitative risk measures at franchise and function level. These statements and measures help determine the level and types of business risk the Group is willing to accept.

Risk controls

For information on risk controls, refer to page 13.

Risk monitoring and measurement

Business risk is identified and managed at the product and transaction level. Estimated revenue, costs and capital are key considerations in the design of any new product or in any new investment decision. Business risk is reported, assessed and challenged at every governance level within the organisation. Financial performance is monitored relative to plans and reported on a regular basis by the NatWest Markets Chief Financial Officer to the NatWest Markets Executive Committee.

Risk mitigation

The Group operates a monthly rolling forecasting process to identify projected changes in, or risks to, key financial metrics, and ensures appropriate actions are taken.

Reputational risk

Definition

Reputational risk is the risk to the Group's public image from a failure to meet stakeholders' expectations in relation to performance, conduct or business profile. Stakeholders include customers, investors, employees, suppliers, government, regulators, special interest and consumer groups, media and the general public.

Sources of risk

Reputational risk can arise from the conduct of employees; customer activities and the sectors and countries in which they operate; provision of products and transactions; as well as operations and infrastructure.

Key developments in 2018

- Metrics were reviewed and enhanced to help measure reputational risk across the Group.
- Risk appetite positions for countries and sectors identified as presenting heightened reputational risk continued to be reviewed and strengthened.

Risk governance

A reputational risk policy supports reputational risk management across the Group. Reputational risk committees review relevant issues at an individual franchise or entity level, while the RBS Group Reputational Risk Committee – which has delegated authority from the Executive Risk Committee – opines on cases, issues, sectors and themes that represent a material reputational risk to the RBS Group. The Board Risk Committee oversees the identification and reporting of reputational risk. The Sustainable Banking Committee has a specific focus on environmental, social and ethical issues.

Risk appetite

The Group manages and articulates its appetite for reputational risk through a qualitative reputational risk appetite statement and quantitative measures. The Group seeks a continued improvement in the identification, assessment and management of customers, transactions, products and issues that present a material reputational risk.

Risk controls

For information on risk controls, refer to page 13.

Risk monitoring and measurement

Primary reputational risk measures are in place to assess internal activity relating to the management of reputational risk, including training. A number of secondary risk measures – including measures also used in the management of operational, conduct and financial risks – are used to assess relevant external factors. Quarterly reports on performance against these measures are provided to the Executive Risk Committee and Board Risk Committee.

Risk mitigation

Reputational risk is mitigated through the policy and governance framework, with ongoing staff training to ensure early identification, assessment and escalation of material issues.

The most material threats to the Group's reputation continued to originate from historical and more recent conduct issues. As a result, the Group has been the subject of investigations and reviews by a number of regulators and governmental authorities, some of which have resulted in fines, settlements and public censure. Refer to the Litigation, investigations and reviews section of Note 27 on the accounts.

Report of the directors

The directors present their report together with the audited accounts for the year ended 31 December 2018.

Other information incorporated into this report by reference can be found at:

	Page
RBS Group ring-fencing	2
Financial review	3
Board of directors and secretary	7
Segmental analysis	Note 4
Share Capital and reserves	Note 22
Post balance sheet events	Note 36
Risk factors	124

Group structure

NatWest Markets Plc (the 'Bank') is a wholly-owned subsidiary of The Royal Bank of Scotland Group plc (the 'holding company'), which is incorporated in Great Britain and has its registered office at 36 St Andrew Square, Edinburgh EH2 2YB. The 'Group' comprises the Bank and its subsidiary and associated undertakings. Details of the principal subsidiary undertakings and their activities are shown in Note 16 on the accounts. A full list of related undertakings of the Bank is shown in Note 37 on the accounts. 'RBS Group' comprises The Royal Bank of Scotland Group plc (the 'ultimate holding company') and its subsidiary and associated undertakings

The financial statements of The Royal Bank of Scotland Group plc can be obtained from RBS Corporate Governance and Regulatory Affairs, RBS Gogarburn, Edinburgh, EH12 1HQ, the Registrar of Companies or through the website rbs.com.

Strategic report

Activities

The Group is engaged principally in providing financing, risk management and trading solutions to customers.

Results and dividends

The profit attributable to the ordinary shareholders of the Group for the year ended 31 December 2018 was £1,241 million compared with a loss of £49 million for the year ended 31 December 2017, as set out in the consolidated income statement on page 61.

The Bank paid two ordinary dividends to RBSG in 2018 totalling £2,550 million, £6.38 per share (2017 – nil).

Employees

As at 31 December 2018, the Group employed 4,700 people (full-time equivalent basis, including temporary workers). This included 1,300 central and support staff who are currently employed by National Westminster Bank Plc, with related costs recharged to the Group. Details of all related costs are included in Note 3 on the consolidated accounts.

Creating a healthy culture

Building a healthy culture that embodies Our Values is a core priority for the Group. Our Values, which guide the way the Group identifies the right people to serve customers

well, and how to manage, engage and reward colleagues, are at the heart of the Code of Conduct.

Engaging colleagues

Engaging colleagues is crucial to achieving the Group's ambition. Every year colleagues are asked to share their thoughts on what it's like to work for the Group via a colleague opinion survey. All key measures have improved in 2018. The continued strengthening of the culture in the Group was also echoed in this year's improved Banking Standards Board assessment which provided further proof of progress across a range of measures.

Developing colleagues

The Group offers a wide range of additional learning opportunities. Employees can access a wide range of additional learning programmes and are actively encouraged to take part in coaching, and training on developing behaviours and good decision-making.

The Group has a range of female development programmes for women to reach their full potential, and helping the Group in the aspiration to be gender balanced by 2030.

Colleague consultation

The Group recognises employee representatives such as employee bodies and work councils in a number of businesses and countries, and management regularly discuss developments and updates on the progress of its strategic plans with the European Employee Council (EEC). The Group has ongoing engagement and discussion with those bodies given the scale of change taking place across the Group.

Colleague Voice

In response to changes which have been made to the UK Corporate Governance Code, the RBS Group has established a Colleague Advisory Panel ("the Panel"), which includes representation from the Bank. The purpose of the Panel is to promote greater colleague voice in the boardroom and provide an additional way for the RBS Group Board to engage directly with colleagues. The Panel consists of existing employee representatives (e.g. Unite, Financial Services Union (FSU), EEC, Employee Led Networks, Junior Management/Colleague Focus Groups and colleagues who have volunteered to be involved). Colleagues from locations outside of the UK and Ireland also sit on the Panel to ensure a broad, diverse range of views. In total, there are approximately 20 colleagues (or their representatives) who attend each Panel meeting. The Panel does not duplicate existing methods to inform and consult (in particular with employee representatives) focusing instead on broader strategic issues. The design of the Panel has been built around having two-way dialogue with clear outputs from the sessions and follow-up to ensure it is viewed as a valuable addition to existing colleague voice methods. More detail can be found on page 14 of the 2018 Annual Report and Accounts of the RBS Group.

Inclusion

The RBS Group's inclusion guidelines apply to all Group colleagues globally and cover being LGBT Innovative, Gender Balanced, Disability Smart, Ethnically Diverse, all leading to an Inclusive Culture. Detailed information can be found on page 16 of the 2018 Annual Report and Accounts of the RBS Group and on the Sustainable Banking pages on rbs.com.

Going concern

The Group's business activities and financial position, the factors likely to affect its future development and performance and its objectives and policies in managing the financial risks to which it is exposed and its capital are discussed in the Financial review. The risk factors which could materially affect the Group's future results are set out on pages 125 to 134. The Group's regulatory capital resources and significant developments in 2018 and anticipated future developments are detailed within the liquidity and funding section on pages 17 to 22, which also describes the Group's funding and liquidity profile, including changes in key metrics and the build up of liquidity reserves.

Having reviewed the Group's forecasts, projections and other relevant evidence, the directors have a reasonable expectation that the Group and the Bank will continue in operational existence for the foreseeable future. Accordingly, the financial statements of the Group and of the Bank have been prepared on a going concern basis.

Corporate governance

Internal control over financial reporting

The internal controls over financial reporting for the Group are consistent with those at the RBS Group level. The Group has designed and assessed the effectiveness of its internal control over financial reporting as of 31 December 2018 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in the 2013 publication of 'Internal Control – Integrated Framework'. Management have considered the additional activities required for its internal control over financial reporting to reflect the size and scale of the business profile compared to RBS Group framework. Any deficiencies identified are reported to the Group Audit Committee along with management's remediation plans.

The Group's auditors have audited the effectiveness of the Group's internal control over financial reporting and have given an unqualified opinion.

Board of directors

The Board is the main decision-making forum for the Bank. It has overall responsibility for the establishment of strategy and the allocation and raising of capital, and is accountable for financial and operational performance. The Board considers strategic issues and ensures the Bank manages risk effectively through approving and monitoring the Bank's risk appetite, considering stress scenarios and agreed mitigants and

Report of the directors

identifying longer term strategic threats to the Bank's business operations. The Board's terms of reference includes key aspects of the Bank's affairs reserved for the Board's decision and are reviewed at least annually.

There are a number of areas where the Board has delegated specific responsibility to management, including the Chief Executive. These include responsibility for the operational management of the Group's businesses as well as reviewing high level strategic issues and considering risk appetite, risk policies and risk management strategies in advance of these being considered by the Board and/or its Committees.

Specific delegated authorities are also in place in relation to business commitments across the Group.

The roles of Chairman and Chief Executive are distinct and separate, with a clear division of responsibilities. The Chairman leads the Board and ensures the effective engagement and contribution of all executive and non-executive directors.

The Chief Executive has responsibility for all Bank businesses and acts in accordance with authority delegated by the Board. The non-executive directors combine business and commercial experience with independent and objective judgement and they provide independent challenge to the executive directors and the leadership team.

The Audit Committee comprises at least two independent non-executive directors and assists the Board in discharging its responsibilities for the disclosure of the financial affairs of the Group. It reviews the accounting policies, financial reporting and regulatory compliance practices of the Group, the Group's system and standards of internal controls, and monitors the Group's processes for internal audit and external audit and reviews the practices of the segmental Risk and Audit Committees.

The Board Risk Committee comprises at least two independent non-executive directors. It provides oversight and advice to the Board on current and potential future risk exposures of the Group and risk strategy. It reviews the Group's performance on risk appetite and oversees the operation of the Group Policy Framework.

The Performance and Remuneration Committee comprises four independent non-executive directors and oversees the implementation of the RBS Group's policy on remuneration. It also considers and makes recommendations on remuneration arrangements for senior executives of the Bank.

The Nominations Committee comprises four non-executive directors, and is chaired by the Chairman of the Bank. It is responsible for assisting the Board in the formal selection and appointment of directors. It reviews the structure, size and composition of the Board, and membership and chairmanship of Board committees.

The Executive Committee comprises the Bank's most senior executives and supports the Chief Executive in managing the Bank's businesses. It reviews strategic issues and initiatives, monitors financial performance and capital allocations, and considers risk strategy, policy and risk management.

Directors

The names of the current directors are shown on page 7.

Directors' interests

Where directors of the Bank are also directors of RBS Group, their interests in the shares of the holding company at 31 December 2018 are shown in the Annual report of remuneration section of the RBS Group's 2018 Annual Report and Accounts. None of the directors held an interest in the loan capital of the holding company or in the shares or loan capital of the Bank or any of the subsidiaries of the Bank, during the period from 1 January 2018 to 14 February 2019.

Directors' indemnities

In terms of section 236 of the Companies Act 2006 (the "Companies Act"), Qualifying Third Party Indemnity Provisions have been issued by the holding company to its directors, members of the Group's Executive Committee, individuals authorised by the PRA/FCA and certain directors and/or officers of the Group's subsidiaries and all trustees of the Group's pension schemes.

Political donations

During 2018, no political donations were made in the UK or EU, nor any political expenditure incurred in the UK or EU.

Directors' disclosure to auditors

Each of the directors at the date of approval of this report confirms that:

- (a) so far as the director is aware, there is no relevant audit information of which the Bank's auditors are unaware; and
 - (b) the director has taken all the steps that he/she ought to have taken as a director to make himself/herself aware of any relevant audit information and to establish that the Bank's auditors are aware of that information.
- This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act.

Auditors

EY LLP are the auditors and have indicated their willingness to continue in office. A resolution to re-appoint EY LLP as the Bank's auditors will be proposed at the forthcoming Annual General Meeting.

By order of the Board

Scott Gibson
Company Secretary
14 February 2019

NatWest Markets Plc
is registered in Scotland No. SC90312

Statement of directors' responsibilities

This statement should be read in conjunction with the responsibilities of the auditor set out in their report on pages 53 to 60.

The directors are responsible for the preparation of the Annual Report and Accounts. The directors are required by Article 4 of the IAS Regulation (European Commission Regulation No 1606/2002) to prepare Group accounts, and as permitted by the Companies Act 2006 have elected to prepare company accounts, for each financial year in accordance with International Financial Reporting Standards as adopted by the European Union. They are responsible for preparing accounts that present fairly the financial position, financial performance and cash flows of the Group and the Bank. In preparing those accounts, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent; and
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the accounts.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Group and to enable them to ensure that the Annual Report and Accounts complies with the Companies Act 2006. They are also responsible for safeguarding the assets of the Bank and the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors confirm that to the best of their knowledge:

- the financial statements, prepared in accordance with International Financial Reporting Standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Bank and the undertakings included in the consolidation taken as a whole; and
- the Strategic Report and Directors' report (incorporating the Financial review) includes a fair review of the development and performance of the business and the position of the Bank and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

Frank Dageard
Chairman

Chris Marks
Chief Executive

Richard Place
Chief Financial Officer

14 February 2019

Board of directors
Chairman
Frank Dageard

Executive directors
Chris Marks
Richard Place

Non-executive directors
Vivek Ahuja
Brendan Nelson
Sarah Wilkinson

Financial statements

	Page
Independent auditor's report	53
Consolidated income statement	61
Consolidated statement of comprehensive income	61
Balance sheet	62
Statement of changes in equity	63
Cash flow statement	65
Accounting policies	66
Notes on the accounts	
1 Net interest income	71
2 Non-interest income	71
3 Operating expenses	72
4 Segmental analysis	73
5 Pensions	75
6 Auditor's remuneration	79
7 Tax	79
8 Profit/loss dealt with in the accounts of the Bank	81
9 Trading assets and liabilities	82
10 Derivatives	83
11 Financial instruments - classification	86
12 Financial instruments - valuation	91
13 Financial instruments - maturity analysis	98
14 Loan impairment provisions	101
15 Other financial assets	102
16 Investments in Group undertakings	103
17 Other assets	103
18 Other financial liabilities	103
19 Subordinated liabilities	104
20 Other liabilities	105
21 Discontinued operations	107
22 Share capital and reserves	107
23 Leases	108
24 Structured entities	108
25 Asset transfers	109
26 Capital resources	110
27 Memorandum items	111
28 Analysis of the net investment in business interests and intangible assets	116
29 Analysis of changes in financing during the year	116
30 Analysis of cash and cash equivalents	116
31 Directors' and key management remuneration	117
32 Transactions with directors and key management	117
33 Adoption of IFRS9	118
34 Related parties	120
35 Ultimate holding company	120
36 Post balance sheet events	120
37 Related undertakings	121

Independent auditor's report to the members of NatWest Markets Plc

Opinion

We have audited the financial statements (see table below) of NatWest Markets Plc (the Bank) and its subsidiaries (together, the 'Group') for the year ended 31 December 2018. In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Bank's affairs as at 31 December 2018 and of the Group's profit for the year then ended;
- the financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- the Bank financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements of NatWest Markets Plc which comprise:

Group	Bank
• Consolidated balance sheet as at 31 December 2018; • Consolidated income statement for the year then ended; • Consolidated statement of comprehensive income for the year then ended; • Consolidated statement of changes in equity for the year then ended; • Consolidated cash flow statement for the year then ended; • Accounting Policies on pages 66 to 70 • Related notes 1 to 37 to the financial statements; and • Capital and risk management section of the Strategic report identified as 'audited'.	• Balance sheet as at 31 December 2018; • Statement of changes in equity for the year then ended; • Cash flow statement for the year then ended; and • Related notes 1 to 37 to the financial statements which refer to the Bank.

The financial reporting framework that has been applied in their preparation is applicable law and IFRSs as adopted by the European Union and, as regards the Bank's financial statements, as applied in accordance with the provisions of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the Group and Bank in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In relation to the ISA's (UK) which require us to report to you, we have nothing to report in respect of the following matters:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's or the Bank's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Separate opinion in relation to IFRSs as issued by the IASB

As explained in the accounting policies, in addition to complying with its legal obligation to apply IFRSs as adopted by the European Union, the Group has applied IFRSs as issued by the International Accounting Standards Board (IASB). In our opinion the Group financial statements comply with IFRS's as issued by the IASB.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. . These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	Our response to the risk
Valuation of financial instruments with higher risk characteristics including related income from trading activities The valuation of financial instruments with higher risk characteristics involves both significant judgement and the risk of inappropriate revenue recognition through incorrect pricing. The judgement in estimating fair value of these instruments can involve complex valuation models and significant fair value adjustments both of which may be reliant on data inputs where there is limited market observability. At 31 December 2018 the Group reported level 3 assets of £3.3 billion (2017:	We performed walkthroughs of transactions from inception to financial reporting to confirm our understanding of process and controls in the area of revenue recognition. We tested the design and operating effectiveness of controls including independent price verification, model review and approval, collateral management, and income statement analysis and reporting. With the support of our internal financial instrument valuation and modelling specialists we performed the following procedures:

Independent auditor's report to the members of NatWest Markets Plc

£2.7 billion) and level 3 liabilities of £2.1 billion (2017: £2.1 billion).

The key judgements and estimates are:

- Complex model-dependent valuations, which include interest-rate swaps linked to pre-payment behaviour and interest rate and foreign exchange options with exotic features such as those having multiple call dates or with a variable notional;
- Pricing inputs and calibrations for illiquid instruments, which are largely aligned with material positions defined as level 3 within the Group's IFRS 7 fair value hierarchy disclosure. These include rarely traded debt securities, and derivative instruments whose valuation is dependent upon the correlation between certain interest rates or uncertainty surrounding the discount rate associated with complex collateral arrangements;
- Fair value adjustments made to derivatives including Funding Valuation Adjustments (FVA) and Credit Valuation Adjustments (CVA) relating to derivative counterparties whose credit spread is less readily able to be determined, and material product and deal specific adjustments on long dated derivative portfolios.
- The manipulation of revenue recognition through the inappropriate valuation of these instruments given the level of management judgement involved.

- Tested complex model-dependent valuations included using our internally developed challenger models and review of model documentation to challenge the appropriateness of models and the adequacy of assumptions and inputs used by the Group.
- We re-priced instruments that had been valued using illiquid pricing inputs, using independently obtained alternative pricing sources, challenging and substantiating any differences between management's valuations.
- For fair value adjustments we compared the methodology used to current market practice. We re-valued a sample of counterparty level FVA and CVA, compared funding spreads to third party data and independently challenged illiquid CVA inputs. We performed back-testing analysis of recent trade activity to verify the drivers of any significant differences between book value and trade value to challenge the impact on the fair value of similar instruments within the portfolio.

Where differences between our independent valuation and management's valuation were outside our thresholds, we performed additional testing over each variance to support our assessment of the appropriateness of the fair value.

Key observations communicated to the Audit Committee

We are satisfied that the fair value of financial instruments with higher risk characteristics and the recognition of related income is reasonable and in accordance with IFRS. We highlighted the following matters to the Audit Committee:

- Complex-model dependent valuations were appropriate based on the output of our independent re-valuation, analysis of trade activity and peer benchmarking;
- The fair value estimates of hard-to-price portfolios appropriately reflected the Group's planned exit route and latest available pricing information; and

Valuation adjustments applied on derivative portfolios for credit, funding and other risks were appropriate based on our assessment of trade activity for positions with common risk characteristics and analysis of market data. We reported a judgemental difference in respect of the estimate involved in portfolio specific valuation adjustments, however this difference was not considered material.

Relevant references in the Annual Report and Accounts

Accounting policies

Note 12 on the financial statements

Risk

Our response to the risk

Provisions for conduct, litigation and regulatory matters, customer remediation and claims

The continued litigious environment and heightened regulatory scrutiny gives rise to a high level of judgement in determining appropriate provisions and disclosures. At 31 December 2018, the Group has reported £0.9 billion (2017: £4.0 billion) of provisions for liabilities and charges, including £0.7 billion (2017: £3.7 billion) for conduct and litigation claims, including Residential Mortgage Backed Securities ('RMBS'), as detailed in Notes 20 and 27 of the financial statements.

Management judgement is needed to determine whether an obligation exists and a provision should be recorded at 31 December 2018 in accordance with the accounting criteria set under IAS 37.

The most significant areas of judgement are:

- Adequacy of provisions: judgement is involved in the determination of whether an outflow in respect of identified material conduct or legal matters are probable and can be estimated reliably and the

We tested the design and operating effectiveness of key controls over the identification, estimation, monitoring and disclosure of provisions considering the potential for management override of controls. The controls tested included those designed and operated by management to assess the completeness and accuracy of data used to estimate provisions.

We examined the relevant regulatory and legal correspondence to assess developments in key cases. For the cases which were settled during the period, we verified the actual outflows, compared with the level of existing provision, considered whether further risk existed, and evaluated the level of disclosures provided.

For the significant provisions made, we understood, assessed and challenged the provisioning methodology. We tested the underlying data and assumptions used in the determination of the provisions recorded, including expected claim rates, legal costs, and the timing of settlement. We also considered peer bank settlements in similar cases.

We received confirmations from the Group's external counsel for significant matters to confirm the existence of the obligation and management's estimate of the outflow at year-end. We corroborated management's conclusion by challenging the underlying information used in estimating the provisions including consideration of alternate sources.

Independent auditor's report to the members of NatWest Markets Plc

appropriateness of assumptions and judgements used in the estimation of material provisions; and • Adequacy of disclosures of provision for liabilities and charges and contingent liabilities	We assessed the adequacy and appropriateness of the disclosures provided on conduct, litigation and regulatory provisions to determine whether they complied with accounting standards. Given the inherent estimation uncertainty and the judgmental nature of these provisions, we evaluated the appropriateness of the disclosure made in the financial statements.
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Key observations communicated to the Audit Committee

We are satisfied that the Group's provisions for conduct, litigation and regulatory matters, customer remediation and claims are within a reasonable range and are recognised in accordance with IFRS. We did not identify any material unrecorded provisions. We highlighted the following matters to the Audit Committee:

- Provisions recorded for conduct litigation and regulatory matters and the associated disclosures for those matters and contingent liabilities were reasonable; and
- We obtained the RMBS settlement agreements with the US Department of Justice and are satisfied that the settlement has been accounted for correctly.

Relevant references in the Annual Report and Accounts

Accounting policies
Notes 20 and 27 on the financial statements

Risk	Our response to the risk
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Impairment of loans

On 1 January 2018, a new accounting standard for financial instruments (IFRS 9) became effective, which introduced impairment based on expected credit losses, rather than the incurred loss model previously applied under IAS 39.

At 31 December 2018 the Group reported total gross loans of £11,758 million and £76 million of expected credit loss provisions.

Key judgements and estimates in respect of the timing and measurement of expected credit losses ('ECL') include:

- Allocation of assets to stage 1, 2, or 3 using criteria in accordance with the accounting standard;
- Accounting interpretations and modelling assumptions used to build the models that calculate the ECL;
- Completeness and accuracy of data used to calculate the ECL;
- Inputs and assumptions used to estimate the impact of multiple economic scenarios;
- Completeness and valuation of post model adjustments;
- Measurements of individually assessed provisions including the assessment of multiple scenarios; and
- Accuracy and adequacy of the financial statement disclosures.

As IFRS 9 was adopted at the start of the year, we performed audit procedures on the opening balances to gain assurance on the transition from IAS 39. This included evaluating the accounting interpretations for compliance with IFRS 9 and testing the adjustments and disclosures made on transition.

We tested the design and operating effectiveness of key controls across the processes relevant to the ECL. This included the allocation of assets into stages, model governance, data accuracy and completeness, credit monitoring, multiple economic scenarios, post model adjustments, individual provisions and production of journal entries and disclosures.

We observed the key executive finance and risk committees where the inputs, assumptions and adjustments to the ECL were discussed and approved.

We performed an overall assessment of the ECL provision levels focussing on ECL movements, by stage to determine if they were reasonable considering the Group's portfolio, risk profile, credit risk management practices and the macroeconomic environment. We considered trends in the economy and industries to which the Group is exposed.

We challenged the criteria used to allocate an asset to stage 1, 2 or 3 in accordance with IFRS 9; this included peer benchmarking to assess staging levels. We tested assets in stage 1, 2 and 3 to verify that they were allocated to the appropriate stage.

With the support of our internal modelling specialists, we tested the assumptions, inputs and formulas used in a sample of ECL models. This included assessing the appropriateness of model design and formulas used, considering alternative modelling techniques and recalculating the Probability of Default, Loss Given Default and Exposure at Default for a sample of models.

To verify data quality, we tested the data used in the ECL calculation by reconciling to source systems. To test credit monitoring, we recalculated the risk ratings for a sample of performing loans.

With the support of our internal economic specialists, we assessed the base case and alternative economic scenarios, including challenging probability weights and comparing to other scenarios from a variety of external sources, as well as EY internally developed forecasts. We assessed whether forecasted macroeconomic variables were appropriate, such as GDP, unemployment, and interest rates. With the support of our modelling specialists we challenged the correlation and impact of the macroeconomic factors to the ECL including how non-linearity was captured.

We assessed the completeness and appropriateness of post model adjustments. Based on current economic conditions and market circumstances, we considered the need for sector or systemic adjustments. We assessed the appropriateness of the scenarios used and calculation of the overlay in response to Brexit related economic uncertainty.

With the support of our internal valuation specialists, we recalculated a sample of individually assessed provisions including comparing to alternative

Independent auditor's report to the members of NatWest Markets Plc

scenarios and challenging the probability weights assigned. The sample was based on a number of factors including counterparties in higher risk sectors.

We assessed the adequacy and appropriateness of disclosures for compliance with the accounting standards including disclosure of transition from IAS 39.

Key observations communicated to the Audit Committee

We are satisfied that allowances for expected credit losses were reasonable and in compliance with IFRS 9. We highlighted the following matters to the Audit Committee:

- Control deficiencies were identified on the transition to IFRS 9 and several compensating controls were implemented to produce accurate and complete financial statement disclosures;
- Our testing and sensitivity analysis on the staging criteria did not identify material differences and overall, we concluded that the stage allocation at 31 December 2018 was reasonable;
- Our testing of models and model assumptions did not highlight material differences; and
- We reported a judgmental difference for an individually assessed impairment, however the difference was not considered material.

Relevant references in the Annual Report and Accounts

Accounting policies

Note 14 on the financial statements

Risk

Our response to the risk

Financial impact of structural reform

The Independent Commission on Banking's ('ICB') structural reform required banks to ensure certain activities and services are undertaken in a ring-fenced bank (RFB) by 1 January 2019. The Group's implementation of structural reform resulted in the reorganisation of some of the legal entities in the RBS Group and the transfer of assets and liabilities between RBS Group entities. These transfers mainly related to the transfer of customer loans (£69 billion) and customer deposits (£78 billion) from the Bank to RBS plc and NatWest Bank plc. Ring-fencing related transfers also included the transfer of the RBS Group Treasury function and related balances to NatWest Bank plc.

Accounting and reporting risks arising include:

- Appropriate application of accounting standards in recording the value of assets and liabilities transferred between legal entities, specifically with respect to fair value and hedge accounting;
- Accuracy of costs recorded in each legal entity given changes to the Group's approach to cost recharging and cost allocation;
- Impact of the restructuring of the Group and movement of legal entities including the carrying value of investments and on equity balances;
- Accuracy of financial reporting given changes to the legal entity financial reporting processes to reflect changes in the Group;
- The transfer of pension scheme members and associated liabilities and assets from the ring-fenced to the non ring-fenced scheme; and
- Presentation and measurement of discontinued operations and comparatives in the financial statements, including that they are fair, balanced and understandable.

With the support of our regulatory specialists we understood the implications of ICB for the RBS Group and gained an understanding of management's process for implementing the ring-fencing regulation. We also examined the relevant regulatory correspondence to understand the impact and resolution of any significant findings that might impact financial reporting.

We challenged management's assessment of the accounting impacts of ICB, including the accounting treatment for transfers of businesses and legal entities and the appropriateness of the interpretations used on areas of judgement, including hedge accounting and pensions, as well as the valuation of the assets moved.

We tested the design and operating effectiveness of key controls and performed substantive procedures over the transfer of balances between legal entities.

We tested controls and performed substantive testing over the recycling of reserves, including merger reserves, cash flow hedge reserves and foreign exchange reserves in addition to reductions in capital and dividends paid. We challenged the criteria applied to identify recycling events.

We tested the design and operating effectiveness of RBS Group's key controls over legal entity recharges, including the governance and implementation of changes to legal entity recharges due to ICB. We tested adherence to internally agreed policies at a legal entity level, including assessments on the appropriateness of transfer pricing mark-ups applied.

We tested the design and operating effectiveness of the Group's key controls over financial reporting as it relates to the implications of ICB and the relevant disclosures.

Key observations communicated to the Audit Committee

We are satisfied that the impact of structural reform has been properly accounted for and disclosed in accordance with IFRS. We highlighted the following matters to the Audit Committee:

- Processes and controls in place over the transfer of balances including the measurement of assets transferred were designed and operated effectively - and
- A control deficiency was identified in relation to foreign exchange reserves. Additional procedures were performed and audit differences identified were not considered material.

Independent auditor's report to the members of NatWest Markets Plc

Relevant references in the Annual Report and Accounts

Accounting policies

Risk	Our response to the risk
Restructuring provisions	
Continued transformation and restructuring programmes as well as ongoing organisational changes has resulted in the recognition of restructuring provisions under IAS 37. At 31 December 2018, the Group recorded total restructuring provisions of £197 million (2017 £324 million). Judgement is involved in determining whether a legal or constructive obligation exists at 31 December 2018 in accordance with the accounting criteria set out under IAS 37 and in estimating the appropriate measurement of provisions.	We tested the design and operating effectiveness of the Group's key controls around the recognition and measurement of restructuring provisions. This included controls to review and approve new and existing provisions recorded by management and the estimates involved in measurement of the provision. For a sample of provisions, we independently assessed whether they met the criteria required under IAS 37 at the balance sheet date and challenged management on the assumptions used to calculate the provisions to confirm appropriate measurement at the balance sheet date.

Key observations communicated to the Audit Committee

We are satisfied that restructuring provisions are appropriately recorded and in compliance with IFRS. We highlighted the following matter to the Audit Committee:

- A control deficiency was identified in relation to restructuring provisions. We performed further testing and reported an audit difference in respect of the extent of the provision recorded. This difference was not considered material.

Relevant references in the Annual Report and Accounts

Accounting policies

Note 20 in the financial statements

Risk	Our response to the risk
IT systems and controls impacting financial reporting	
The IT environment is complex and pervasive to the operations of the Group due to the large volume of transactions processed in numerous locations daily and the reliance on automated and IT dependent manual controls. Appropriate IT controls are required to ensure that applications process data as expected and that changes are made in an appropriate manner. Such controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data. Our audit approach relies upon IT applications and the related control environment including: • User access management across application, database and operating systems; • Changes to the IT environment, including transformation that changes the IT landscape; • IT operational controls; • IT application or IT dependent controls; and • Evaluation of IT control environment at third party service providers.	We assessed and challenged the design and operating effectiveness of IT controls over the applications, operating systems and databases that are relevant to financial reporting. We assessed automated controls within business processes and the reliability of relevant reports used as part of a manual control. This included challenging the integrity of system interfaces, the completeness and accuracy of data feeds, automated calculations and specific input controls. We assessed and challenged system migrations and related technology changes resulting from transformation programmes that were material to financial reporting. Where we identified systems outsourced to third party service providers we challenged IT general controls through the relevant Service Organisation Controls Reports produced by third parties and tested assessed required complementary controls performed by the Group. Where control deficiencies were identified, we tested remediation activities performed by management and compensating controls in place and assessed where necessary to mitigate any residual risk.

Key observations communicated to the Audit Committee

We are satisfied that IT controls relevant to financial reporting operated effectively at year-end. We highlighted the following matters to the Audit Committee:

- Instances of user access related deficiencies were identified. Compensating controls were tested or alternate procedures were performed; and
- Exceptions were reported in some Service Organisation Controls Reports provided by third parties. We tested compensating controls with no issues noted.

Relevant references in the Annual Report and Accounts

Accounting policies

In the prior year, our auditor's report included key audit matters in relation to;

- Future profitability estimates impacting the recognition of deferred tax, impairment in goodwill and, in the Bank accounts, investments in subsidiaries;
- Hedge effectiveness testing including the impact on non-interest income;
- Costs recharged to or from other RBS Group companies; and
- Pension valuation and retirement benefit obligations.

Independent auditor's report to the members of NatWest Markets Plc

In 2018, given the impact of structural reform, these were not considered key audit matters.

An overview of the scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each component of the Group. Taken together, this enables us to form an opinion on the financial statements. We take into account the size and risk profile of each component and its activities, the organisation of the Group and effectiveness of Group-wide controls, changes in the business environment and other factors such as recent internal audit results when assessing the level of work to be performed at each component.

Our audit covers the reportable segments identified in the financial statements. This incorporates the NatWest Markets component (full scope), with key locations in the United Kingdom, United States & Singapore, and the central functions of the Group including Financial Control & Reporting and Services. The UK Personal & Business Banking, Commercial Banking and Treasury components are also included as full scope components due to their contribution to discontinued operations during the year.

Changes from the prior year

In 2017 Ulster Bank Rol (specific scope component) and Private Banking (specific scope component) were included due to their contribution to discontinued operations.

The table below illustrates the coverage obtained from the work performed by our audit teams. The coverage includes the full scope components presented in disposal groups as noted above. As the Group has historically made losses and several operations were moved to discontinued operations, we considered total assets, total equity and the absolute value of the amounts in the income statement (meaning the magnitude of the amounts without regard to their positive or negative value) to verify we had appropriate overall coverage on the income statement.

	Full scope	Specific scope	Other procedures	Total
Total assets	100%	0%	0%	100%
Total equity	94%	0%	4%	100%
Absolute value of the income statement	97%	0%	3%	100%

Involvement with component teams

In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken in each of the components by us, as the primary audit engagement team, or by component auditors in the United Kingdom or from other EY global network firms operating under our instruction.

The primary audit engagement team interacted regularly with the component audit teams where appropriate throughout the course of the audit, which included holding planning meetings, maintaining regular communications on the status of the audits, reviewing key working papers and taking responsibility for the scope and direction of the audit process. The primary audit engagement team also participated in meetings with key management personnel in the components and, for certain overseas locations, implemented a programme of planned visits. These visits involved discussing the audit approach with the component team and any issues arising from their work, as well as meeting with local management. This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

The magnitude of omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group and Bank to be £90 million (2017 materiality: £220 million), which is 1% of equity of the Group. The change from the prior year is driven primarily by the reduction in equity from £35.2 billion in RBS Plc at December 2017 to £9.1 billion in NatWest Markets Plc at December 2018.

Performance materiality

The application of materiality at the individual account or balance level is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and corrected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality should be set at 50% of our materiality, namely £45 million (2017: £110 million). We have set performance materiality at this percentage based on various considerations including the past history of misstatements, the effectiveness of the control environment and other factors affecting the entity and its financial reporting.

Audit work of component teams for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component team is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated by the primary audit engagement team to components was between £15 million and £45 million.

¹ Full scope: audit procedures on all significant accounts

² Specific scope: audit procedures on selected accounts

³ Other procedures: considered in analytical procedures

Reporting threshold

Independent auditor's report to the members of NatWest Markets Plc

An amount below which identified misstatements are considered to be clearly trivial.

We agreed with the Audit Committee that we would report to them all corrected and uncorrected audit misstatements in excess of £4 million, which is 5% of materiality, as well as misstatements below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative and qualitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the Annual Report and Accounts, including the Strategic Report, Report of the Directors, Statement of Directors' Responsibilities, and Risk Factors and Forward-looking statements, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, the part of the directors' remuneration disclosure to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Report of the Directors for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Report of the Directors have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In light of the knowledge and understanding of the Group and the Bank and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report or the Report of the directors.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Group, or returns adequate for our audit have not been received from branches not visited by us; or
- the Bank financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit

Responsibilities of directors

As explained more fully in the Statement of Directors' Responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for the implementation of such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Bank or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

The objectives of our audit, in respect to fraud, are; to identify and assess the risks of material misstatement of the financial statements due to fraud; to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud, through designing and implementing appropriate responses; and to respond appropriately to fraud or suspected fraud identified during the audit. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management.

We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group and have a direct impact on the preparation of the financial statements. We determined that the most significant are:

- Companies Act 2006
- Financial Reporting Council (FRC) and the UK Corporate Governance Code
- Tax Legislation (governed by HM Revenue and Customs)

We understood how the Group is complying with those frameworks by reviewing the RBS Policy Framework, holding discussions with the Group's general counsel and internal audit, amongst others. We inquired as to any known instances of non-compliance or suspected non-compliance with laws and regulations. We also reviewed RBS Group's Complaints Management Policy and Whistleblowing Policy. We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur by holding discussions

Independent auditor's report to the members of NatWest Markets Plc

with senior management, including the Chief Executive, Chief Financial Officer, Chief Risk Officer, Head of Internal Audit and Audit Committee Chairman. We also reviewed the Group's fraud-related policies and mandates of different governance forums assessing fraud. Based on this understanding we designed our audit procedures to identify non-compliance with such laws and regulations. Our procedures involved inquiring of key management, reviewing the key policies and reports on the aforementioned regulatory frameworks as well as reviewing the correspondence exchanged with the Regulators.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

Other matters we are required to address

- Following the recommendation of the RBS Group Audit Committee we were appointed by the RBS Group at its annual general meeting on 4 May 2016 to audit the financial statements of the RBS Group and its major subsidiaries for the period ending 31 December 2016 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments is three years, covering periods from our appointment through 31 December 2018.
- The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Bank and we remain independent of the Group and the Bank in conducting the audit.
- The audit opinion is consistent with the additional report to the Audit Committee

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Jonathan Bourne (Senior Statutory Auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London, United Kingdom
14 February 2019

Note:

- (1) The maintenance and integrity of the RBS Group web site is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the web site. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Consolidated income statement for the year ended 31 December 2018

	Note	2018 £m	2017 £m
Interest receivable		406	270
Interest payable		(673)	(222)
Net interest income	1	(267)	48
Fees and commissions receivable		260	282
Fees and commissions payable		(233)	(275)
Income from trading activities		1,045	737
Gain on redemption of own debt		101	—
Other operating income		(48)	119
Non-interest income	2	1,125	863
Total income		858	911
Staff costs		(579)	(894)
Premises and equipment		(120)	(152)
Other administrative expenses		(1,524)	(1,389)
Depreciation and amortisation		(14)	49
Operating expenses	3	(2,237)	(2,386)
Loss before impairment losses		(1,379)	(1,475)
Impairment losses	14	102	79
Operating loss before tax		(1,277)	(1,396)
Tax credit	7	33	160
Loss from continuing operations		(1,244)	(1,236)
Profit from discontinued operations, net of tax	21	2,461	1,192
Profit/(loss) for the year		1,217	(44)
Attributable to:			
Ordinary shareholders		1,241	(49)
Non-controlling interests		(24)	5
		1,217	(44)

Consolidated statement of comprehensive income for the year ended 31 December 2018

	Note	2018 £m	2017 £m
Profit/(loss) for the year		1,217	(44)
Items that do not qualify for reclassification			
Remeasurement of retirement benefit schemes	5	(2,053)	—
- contributions in preparation for ring-fencing (1)		(2)	63
- other movements			
Profit/(loss) on fair value of credit in financial liabilities designated at fair value through profit or loss due to own credit risk		121	(68)
Fair value through other comprehensive income (FVOCI) financial assets (2)		100	—
Tax		492	(20)
		(1,342)	(25)
Items that do qualify for reclassification			
Fair value through other comprehensive income (FVOCI) financial assets (2)		(386)	24
Cash flow hedges		(125)	(864)
Currency translation		(723)	134
Tax		131	209
		(1,103)	(497)
Other comprehensive loss after tax		(2,445)	(522)
Total comprehensive loss for the year		(1,228)	(566)
Attributable to:			
Ordinary shareholders		(1,205)	(566)
Non-controlling interests		(23)	—
		(1,228)	(566)

Notes:

- (1) On 17 April 2018 the RBS Group agreed a Memorandum of Understanding (MoU) with the Trustees of the RBS Group Pension Fund in connection with the requirements of ring-fencing. NatWest Markets Plc cannot continue to be a participant in the Main section and separate arrangements are required for its employees. Under the MoU, NatWest Bank Plc made a contribution of £2 billion on 9 October 2018 to strengthen funding of the Main section in recognition of the changes in covenant, this is within discontinued operations in the Group results. Also under the MoU, NatWest Markets Plc is required to make a £53 million contribution to the NWM section in Q1 2019, this is within continuing operations within the Group results.
- (2) Refer to Note 33 for further information on the impact of IFRS 9 on classification and basis of preparation, year ended 31 December 2018 prepared under IFRS 9 and year ended 31 December 2017 under IAS 39.
- (3) A profit of £2,458 million (2017 – profit £1,188 million) from discontinued operations was attributable to ordinary and equity preference shareholders.

The accompanying notes on pages 71 to 120, the accounting policies on pages 66 to 70 and the audited sections of the Financial review: Capital and risk management on pages 10 to 48 form an integral part of these financial statements.

Balance sheet as at 31 December 2018

		Group		Bank	
	Note	2018 £m	2017 £m	2018 £m	2017 £m
Assets					
Cash and balances at central banks	11	11,188	153	11,095	93
Trading assets	9	74,972	85,932	61,990	73,011
Derivatives	10	134,250	159,278	134,291	162,005
Settlement balances	11	2,705	2,497	1,421	1,614
Loans to banks - amortised cost	11	626	371	454	195
Loans to customers - amortised cost	11	8,366	9,638	7,908	9,133
Amounts due from holding company and fellow subsidiaries		3,398	216	11,800	6,470
Other financial assets	15	11,268	3,120	10,995	3,079
Investment in group undertakings	16	—	—	1,151	496
Other assets	17	1,108	465,032	936	269,793
Total assets		247,881	726,237	242,041	525,889
Liabilities					
Bank deposits	11	2,749	528	2,777	527
Customer deposits	11	2,580	3,257	2,390	3,063
Amounts due to holding company and fellow subsidiaries	11	10,161	90	23,505	14,994
Settlement balances	11	2,914	2,817	1,977	1,372
Trading liabilities	9	72,289	81,960	54,540	64,182
Derivatives	10	129,914	153,330	129,974	155,098
Other financial liabilities	18	16,279	11,255	16,279	11,255
Other liabilities	20	1,906	437,740	1,677	230,876
Total liabilities		238,792	690,977	233,119	481,367
Owners' equity	22	9,087	35,203	8,922	44,522
Non-controlling interests		2	57	—	—
Total equity		9,089	35,260	8,922	44,522
Total liabilities and equity		247,881	726,237	242,041	525,889

Owners' equity of the Bank as at 31 December 2018 includes the loss for the year of £305 million (2017 loss - £983 million).

The accompanying notes on pages 71 to 120, the accounting policies on pages 66 to 70 and the audited sections of the Financial review: Capital and risk management on pages 10 to 48 form an integral part of these financial statements.

The accounts were approved by the Board of directors on 14 February 2019 and signed on its behalf by:

Frank Dangeard
Chairman

Chris Marks
Chief Executive

Richard Place
Chief Financial Officer

NatWest Markets Plc
Registration No. SC90312

Statement of changes in equity for the year ended 31 December 2018

	Group		Bank	
	2018	2017	2018	2017
	£m	£m	£m	£m
Called-up share capital - at 1 January	6,609	6,609	6,609	6,609
Court approved distribution (1)	(6,209)	—	(6,209)	—
At 31 December	400	6,609	400	6,609
Share premium account - at 1 January	26,807	26,807	26,807	26,807
Court approved distribution (1)	(27,692)	—	(27,692)	—
Redemption of debt preference shares (2)	2,644	—	2,644	—
At 31 December	1,759	26,807	1,759	26,807
Paid-in equity - at 1 January	—	—	—	—
Securities issued during the year	749	—	749	—
At 31 December	749	—	749	—
Merger reserve - at 1 January	10,881	10,881	—	—
Transfer to retained earnings on disposal of subsidiary (3)	(10,881)	—	—	—
At 31 December	—	10,881	—	—
FVOCI reserve - at 1 January (4)	300	291	280	249
Implementation of IFRS 9 on 1 January 2018	30	—	(15)	—
Unrealised gains	141	200	159	213
Realised gains	(427)	(176)	(16)	(161)
Tax	90	(15)	(34)	(21)
Recycled on transfer to fellow subsidiary	—	—	—	—
- gross	—	—	(460)	—
- tax	—	—	124	—
At 31 December	134	300	38	280
Cash flow hedging reserve - at 1 January	205	842	(49)	261
Amount recognised in equity (5)	(316)	(120)	(109)	(61)
Amount transferred from equity to earnings (5)	(264)	(744)	(127)	(363)
Tax	34	227	(60)	114
Recycled on transfer to fellow subsidiary	455	—	459	—
At 31 December (6)	114	205	114	(49)
Foreign exchange reserve - at 1 January	953	817	(304)	(282)
Retranslation of net assets	(83)	145	(38)	(69)
Foreign currency gains/(losses) on hedges of net assets	1	(25)	8	36
Tax	1	(3)	—	—
Recycled to profit or loss on disposal of businesses	(642)	19	198	11
At 31 December (7)	230	953	(136)	(304)

For notes to these tables refer to the following page

Statement of changes in equity for the year ended 31 December 2018

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Retained earnings - at 1 January	(10,552)	(10,490)	11,179	12,232
Implementation of IFRS 9 on 1 January 2018 (4)	(106)	—	261	—
(Loss)/profit attributable to ordinary				
- continuing operations	(1,217)	(1,237)	(359)	(473)
- discontinued operations	2,458	1,188	54	(510)
Ordinary dividends paid	(2,550)	—	(2,550)	—
Court approved distribution (1)	10,848	—	—	—
Transfer from merger reserve on disposal of subsidiary (3)	10,881	—	—	—
Realised gains on FVOCI equity shares	12	—	9	—
Remeasurement of retirement benefit schemes				
- contributions in preparation for ring-fencing (8)	(2,053)	—	(53)	—
- other movements	(2)	63	(9)	4
- tax	531	(38)	15	(36)
Changes in fair value of credit in financial liabilities designated at fair value through profit				
- gross	121	(68)	121	(68)
- tax	(33)	18	(33)	18
Redemption of debt preference shares (2)	(2,644)	—	(2,644)	—
Shares issued under employee share schemes	(2)	(5)	(2)	(5)
Share-based payments	9	17	9	17
At 31 December	5,701	(10,552)	5,998	11,179
Owners' equity at 31 December	9,087	35,203	8,922	44,522
Non-controlling interests - at 1 January	57	62	—	—
Currency translation adjustments and other movements	1	(5)	—	—
(Loss)/profit attributable to non-controlling interests				
- continuing operations	(27)	1	—	—
- discontinued operations	3	4	—	—
Dividends paid	—	(5)	—	—
Equity withdrawn and disposals	(32)	—	—	—
At 31 December	2	57	—	—
Total equity at 31 December	9,089	35,260	8,922	44,522
Total equity is attributable to:				
Ordinary shareholders	8,338	35,203	8,173	44,522
Paid-in equity holders	749	—	749	—
Non-controlling interests	2	57	—	—
	9,089	35,260	8,922	44,522

Notes:

- (1) On 29 June 2018, the Court of Session in Scotland approved the reduction of the capital and cancellation of the share premium account and capital redemption reserve (together the "capital reduction") of NWM Plc. As part of the of the capital reduction, NatWest Holdings transferred to RBSG with effect from 2 July 2018 thereby creating the legal separation of those RBS Group entities that will be within the ring-fenced sub-group from those held outside the ring-fence.
- (2) Issued by the Bank to the parent company, RBSG, which were redeemed in April 2018 and December 2018.
- (3) On 2 July 2018, the merger reserve was transferred to retained earnings on the transfer of NatWest Holdings to RBSG.
- (4) Refer to Note 33 for further information on the impact of IFRS 9 on classification and basis of preparation, year ended 31 December 2018 prepared under IFRS 9 and year ended 31 December 2017 under IAS 39.
- (5) Relates to interest rate hedges. Amounts transferred to earnings are recognised in net interest income.
- (6) The closing balance of the cash flow hedging reserve relates mainly to continuing hedges.
- (7) The hedging element of the foreign exchange reserve mainly relates to de-designated hedges in Group and continuing hedges in Bank.
- (8) On 17 April 2018 RBS agreed a Memorandum of Understanding (MoU) with the Trustees of the RBS Group Pension Fund in connection with the requirements of ring-fencing. NatWest Markets Plc cannot continue to be a participant in the Main section and separate arrangements are required for its employees. Under the MoU, NatWest Bank made a contribution of £2 billion on 9 October 2018 to strengthen funding of the Main section in recognition of the changes in covenant. Also under the MoU, NatWest Markets Plc is required to make a £53 million contribution to the NWM section in Q1 2019.

The accompanying notes on pages 71 to 120, the accounting policies on pages 66 to 70 and the audited sections of the Financial review: Capital and risk management on 10 to 48 form an integral part of these financial statements.

Cash flow statement for the year ended 31 December 2018

	Note	Group		Bank	
		2018 £m	2017 £m	2018 £m	2017 £m
Cash flows from operating activities					
Operating loss before tax from continuing operations		(1,277)	(1,396)	(410)	(641)
Profit/(loss) before tax from discontinued operations		2,893	2,013	71	(653)
Interest on subordinated liabilities		199	318	184	44
Impairment losses/(releases) on loans to banks and customers		83	(601)	(17)	(306)
Profit on sale of subsidiaries and associates		(30)	(167)	182	(145)
(Profit)/loss on sale of securities		(961)	(145)	(466)	(152)
Defined benefit pension schemes		80	(254)	29	89
Provisions: expenditure in excess of charges		(3,294)	(3,762)	(1,668)	(449)
Depreciation, amortisation and impairment of property, plant, equipment, goodwill and intangibles		362	755	140	424
(Profit)/loss on redemption of own debt		(153)	789	(101)	789
Loss on reclassification to disposal groups		-	539	-	341
Write down of investment in subsidiaries		-	-	192	1,073
Elimination of foreign exchange differences		(231)	116	(82)	(268)
Other non-cash items		(530)	(1,975)	2,353	(327)
Net cash (outflow)/inflow from trading activities		(2,859)	(3,770)	407	(181)
(Increase)/decrease in net loans to banks and customers		(13,249)	9,796	(2,708)	120,815
(Increase)/decrease in securities		(673)	(1,612)	(668)	42,896
(Increase)/decrease in other assets		(14,227)	(121,108)	118,874	(234,644)
(Increase)/decrease in trading assets and liabilities		(975)	-	1,378	-
Decrease in derivative assets and liabilities		875	3,897	2,590	3,664
(Decrease)/increase in settlement balance assets and liabilities and short positions		(99)	8,740	899	10,321
Increase/(decrease) in banks and customers deposits		11,248	43,293	7,180	(226,195)
Increase/(decrease) in debt securities in issue		4,518	(8,000)	4,466	(6,519)
Increase/(decrease) in other liabilities		23,194	11,229	(133,752)	215,683
Changes in operating assets and liabilities		10,612	(53,765)	(1,741)	(73,979)
Income taxes (paid)/received		(116)	(546)	26	(197)
Net cash flows from operating activities (1)		7,637	(58,081)	(1,308)	(74,357)
Cash flows from investing activities					
Sale and maturity of securities		2,975	11,175	2,975	11,988
Purchase of securities		(6,432)	(16,015)	(6,432)	(14,655)
Sale of property, plant and equipment		60	404	-	65
Purchase of property, plant and equipment		(37)	(1,123)	-	(187)
Net divestment of/(investment in) business interests and intangible assets	28	1,547	1,912	21,745	712
Net cash flows from investing activities		(1,887)	(3,647)	18,288	(2,077)
Cash flows from financing activities					
Issue of other equity instruments: Additional Tier 1 capital notes		749	-	749	-
Shares issued under employee share schemes		(2)	-	(2)	-
Non-controlling interests equity withdrawn and disposals		(21)	-	-	-
Redemption of subordinated liabilities		(3,769)	(9,624)	(3,769)	(9,431)
Dividends paid		(2,550)	(5)	(2,550)	-
Interest on subordinated liabilities		(238)	(417)	(223)	(237)
Net cash flows from financing activities		(5,831)	(10,046)	(5,795)	(9,668)
Effects of exchange rate changes on cash and cash equivalents		525	(570)	332	87
Net increase/(increase) in cash and cash equivalents		444	(72,344)	11,517	(86,015)
Cash and cash equivalents at 1 January		25,683	98,027	13,058	99,073
Cash and cash equivalents at 31 December	30	26,127	25,683	24,575	13,058

The accompanying notes on pages 71 to 120, the accounting policies on pages 66 to 70 and the audited sections of the Financial review: Capital and risk management on pages 10 to 48 form an integral part of these financial statements.

Note:

(1) Includes interest received for Group of £297 million (2017 - £10,694 million) and interest paid of £586 million (2017 - £2,631 million), and for Bank interest received of £428 million (2017 - £4,445 million) and interest paid of £648 million (2017 - £2,479 million).

Accounting policies

1. Presentation of accounts

The accounts set out on pages 61 to 120, including these accounting policies on pages 66 to 70 and the audited sections of the Financial review: Capital and risk management on pages 10 to 48, are prepared on a going concern basis (see the Report of the directors, page 49) and in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IASB) and interpretations as issued by the IFRS Interpretations Committee of the IASB and adopted by the European Union (EU) (together IFRS).

The company is incorporated in the UK and registered in Scotland. Its accounts are presented in accordance with the Companies Act 2006.

With the exception certain financial instruments as described in Accounting policies 13 and 20, the accounts are presented on an historical cost basis.

NatWest Holdings was classified as a disposal group at 31 December 2017. Refer to Note 21 for further information.

Adoption of IFRS 9

Refer to Note 33 for details of the adoption of IFRS 9.

Other amendments to IFRS

IFRS 15 'Revenue from Contracts with Customers' has been adopted with effect from 1 January 2018. The Accounting policy is updated to reflect the terminology in the new standard but it has had no effect on financial information reported in the current or comparative periods. Interest income and expense continues to be recognised using the effective interest rate method for financial instruments measured at historical cost. There has been no restatement of profit or loss for comparative periods.

Other amendments to IFRS effective for 2018, including IFRS 2 'Share-based payments' and IAS 40 'Investment Property' have not had a material effect on the Group's financial statements

2. Basis of consolidation

The consolidated accounts incorporate the financial statements of the company and entities (including certain structured entities) that are controlled by the Group. The Group controls another entity (a subsidiary) when it is exposed, or has rights, to variable returns from its involvement with that entity and has the ability to affect those returns through its power over the other entity; power generally arises from holding a majority of voting rights. On the acquisition of a business from a group company, the assets, liabilities and IFRS reserves, such as the cash flow hedging reserve, are recognised at inherited values. Inherited values are taken from the consolidated accounts of the Royal Bank of Scotland Group plc and including the accounting history since initial recognition. The acquirer recognises in merger reserve any difference between the consideration paid

and the net items recognised at inherited values. Changes in the Group's interest in a subsidiary that do not result in the Group ceasing to control that subsidiary are accounted for as equity transactions.

All intergroup balances, transactions, income and expenses are eliminated on consolidation. The consolidated accounts are prepared under uniform accounting policies.

3. Recognition of Business transfers

On the acquisition of a business from a Group company, the assets, liabilities and IFRS reserves are recognised at inherited values.

Inherited values are taken from the consolidated accounts of RBSG plc and include the accounting history since initial recognition. The acquirer recognises in merger reserve, any difference between the consideration paid and the net items recognised at inherited values

4. Revenue recognition

Interest income or expense on financial instruments that are measured at amortised cost and fair value through comprehensive income are determined using the effective interest rate method. The effective interest rate allocates the interest income or interest expense over the expected life of the asset or liability at the rate that exactly discounts all estimated future cash flows to equal the instrument's initial carrying amount.

Calculation of the effective interest rate takes into account fees payable or receivable that are an integral part of the instrument's yield, premiums or discounts on acquisition or issue, early redemption fees and transaction costs. All contractual terms of a financial instrument are considered when estimating future cash flows. Negative effective interest accruing to financial assets is presented in interest payable.

Net interest income in the income statement only relates to financial instruments measured at amortised cost; the interest on debt instruments classified as fair value through OCI; and the effective part of any related accounting hedging instruments. Other interest relating to financial instruments measured at fair value is recognised as part of the movement in fair value.

Fees in respect of services are recognised as the right to consideration accrues through the performance of each distinct service obligation to the customer. The arrangements are generally contractual and the cost of providing the service is incurred as each service is performed. The price is usually fixed and always determinable.

5. Assets held for sale and discontinued operations

A non-current asset (or disposal group) is classified as held for sale if the Group will recover its carrying amount principally through a sale transaction rather than through continuing use. A non-current asset (or disposal group) classified as held for sale is measured at the lower of its carrying amount

and fair value less costs to sell. If the asset (or disposal group) is acquired as part of a business combination it is initially measured at fair value less costs to sell.

Assets and liabilities of disposal groups classified as held for sale and non-current assets classified as held for sale are shown separately on the face of the balance sheet.

The results of discontinued operations, comprising the post-tax profit or loss of discontinued operations and the post-tax gain or loss recognised either on measurement to fair value less costs to sell or on disposal of the discontinued operation, are shown as a single amount on the face of the income statement; an analysis of this amount is presented in Note 21 on the accounts. A discontinued operation is a cash generating unit or a group of cash generating units that either has been disposed of, or is classified as held for sale, and (a) represents a separate major line of business or geographical area of operations, (b) is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or (c) is a subsidiary acquired exclusively with a view to resale.

6. Employee benefits

Short-term employee benefits, such as salaries, paid absences, and other benefits are accounted for on an accruals basis over the period in which the employees provide the related services. Employees may receive variable compensation satisfied by cash, by debt instruments issued by the Group or by RBSG shares. The treatment of share-based compensation is set out in Accounting policy 21. Variable compensation that is settled in cash or debt instruments is charged to profit or loss over the period from the start of the year to which the variable compensation relates to the expected settlement date taking account of forfeiture and clawback criteria.

Contributions to defined contribution pension schemes are recognised in profit or loss when payable.

For defined benefit schemes, the defined benefit obligation is measured on an actuarial basis using the projected unit credit method and discounted at a rate determined by reference to market yields at the end of the reporting period on high quality corporate bonds of equivalent term and currency to the scheme liabilities. Scheme assets are measured at their fair value. The difference between scheme assets and scheme liabilities, the net defined benefit asset or liability, is recognised in the balance sheet. A defined benefit asset is limited to the present value of any economic benefits available to the Group in the form of refunds from the plan or reduced contributions to it.

The charge to profit or loss for pension costs (recorded in operating expenses) comprises:

- the current service cost
- interest, computed at the rate used to discount scheme liabilities, on the net defined benefit liability or asset

Accounting policies

- past service cost resulting from a scheme amendment or curtailment
- gains or losses on settlement.

Actuarial gains and losses (i.e. gains or and losses on re-measuring the net defined benefit asset or liability) are recognised in other comprehensive income in full in the period in which they arise.

7. Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses.

Depreciation is charged to profit or loss on a straight-line basis so as to write-off the depreciable amount of property, plant and equipment (including assets owned and let on operating leases) over their estimated useful lives. The depreciable amount is the cost of an asset less its residual value. Freehold land is not depreciated.

The estimated useful lives of the Group's property, plant and equipment are:

- Long leasehold property with more than 50 years to run) - 50 years
- Short leaseholds - unexpired period of the lease
- Property adaptation costs - 10 to 15 years
- Computer equipment - up to 5 years
- Other equipment - 4 to 15 years

The residual value and useful life of property, plant and equipment are reviewed at each balance sheet date and updated for any changes to previous estimates.

8. Impairment of property, plant and equipment

At each balance sheet date, the Group assesses whether there is any indication that its property, plant and equipment are impaired. If any such indication exists, the Group estimates the recoverable amount of the asset and the impairment loss if any.

If an asset does not generate cash flows that are independent from those of other assets or groups of assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs. The recoverable amount of an asset or cash-generating unit is the higher of its fair value less cost to sell and its value in use. Value in use is the present value of future cash flows from the asset or cash-generating unit discounted at a rate that reflects market interest rates adjusted for risks specific to the asset or cash-generating unit that have not been taken into account in estimating future cash flows. If the recoverable amount of an intangible or tangible asset is less than its carrying value, an impairment loss is recognised immediately in profit or loss and the carrying value of the asset reduced by the amount of the loss.

A reversal of an impairment loss on intangible assets or property, plant and equipment can be recognised when an increase in service potential arises provided the increased carrying value is not greater than it would

have been had no impairment loss been recognised.

9. Foreign currencies

The Group's consolidated financial statements are presented in sterling which is the functional currency of the company.

Transactions in foreign currencies are recorded in the functional currency at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into the relevant functional currency at the foreign exchange rates ruling at the balance sheet date. Foreign exchange differences arising on the settlement of foreign currency transactions and from the translation of monetary assets and liabilities are reported in income from trading activities except for differences arising on cash flow hedges and hedges of net investments in foreign operations (see Accounting policy 20).

Non-monetary items denominated in foreign currencies that are stated at fair value are translated into the relevant functional currency at the foreign exchange rates ruling at the dates the values are determined. Translation differences arising on non-monetary items measured at fair value are recognised in profit or loss except for differences arising on non-monetary financial assets classified as fair value through OCI, for example equity shares, which are recognised in other comprehensive income unless the asset is the hedged item in a fair value hedge.

Assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated into sterling at foreign exchange rates ruling at the balance sheet date. Income and expenses of foreign operations are translated into sterling at average exchange rates unless these do not approximate to the foreign exchange rates ruling at the dates of the transactions. Foreign exchange differences arising on the translation of a foreign operation are recognised in other comprehensive income. The amount accumulated in equity is reclassified from equity to profit or loss on disposal of a foreign operation.

10. Leases

As lessor

Contracts with customers to lease assets are classified as finance leases if they transfer substantially all the risks and rewards of ownership of the asset to the customer; all other contracts with customers to lease assets are classified as operating leases.

Finance lease receivables are included in the balance sheet, within net loans to customers, at the amount of the net investment in the lease being the minimum lease payments and any unguaranteed residual value discounted at the interest rate implicit in the lease.

Finance lease income is allocated to accounting periods so as to give a constant periodic rate of return before tax on the net investment and included in Interest receivable. Unguaranteed residual values are subject to regular review; if there is a reduction in their value, income allocation is

revised and any reduction in respect of amounts accrued is recognised immediately.

Rental income from operating leases is recognised in income on a straight-line basis over the lease term unless another systematic basis better represents the time pattern of the asset's use. Operating lease assets are included within Property, plant and equipment and depreciated over their useful lives (see Accounting policy 7). Operating lease rentals receivable are included in Other operating income.

As lessee

The Group's contracts to lease assets are principally operating leases. Operating lease rental expense is included in Premises and equipment costs and recognised as an expense on a straight-line basis over the lease term unless another systematic basis better represents the benefit to the Group.

11. Provisions

The Group recognises a provision for a present obligation resulting from a past event when it is more likely than not that it will be required to transfer economic benefits to settle the obligation and the amount of the obligation can be estimated reliably. Provision is made for restructuring costs, including the costs of redundancy, when the Group has a constructive obligation to restructure. An obligation exists when the Group has a detailed formal plan for the restructuring and has raised a valid expectation in those affected by starting to implement the plan or by announcing its main features.

If the Group has a contract that is onerous, it recognises the present obligation under the contract as a provision. An onerous contract is one where the unavoidable costs of meeting the Group's contractual obligations exceed the expected economic benefits. When the Group vacates a leasehold property, a provision is recognised for the costs under the lease less any expected economic benefits (such as rental income).

Contingent liabilities are possible obligations arising from past events, whose existence will be confirmed only by uncertain future events, or present obligations arising from past events that are not recognised because either an outflow of economic benefits is not probable or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognised but information about them is disclosed unless the possibility of any outflow of economic benefits in settlement is remote.

12. Tax

Income tax expense or income, comprising current tax and deferred tax, is recorded in the income statement except income tax on items recognised outside profit or loss which is credited or charged to other comprehensive income or to equity as appropriate.

Current tax is income tax payable or recoverable in respect of the taxable profit or loss for the year arising in profit or loss, other comprehensive income or equity. Provision is

Accounting policies

made for current tax at rates enacted or substantively enacted at the balance sheet date.

Deferred tax is the tax expected to be payable or recoverable in respect of temporary differences between the carrying amount of an asset or liability for accounting purposes and its carrying amount for tax purposes. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that the asset will be recovered. Deferred tax is not recognised on temporary differences that arise from initial recognition of an asset or a liability in a transaction (other than a business combination) that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is calculated using tax rates expected to apply in the periods when the assets will be realised or the liabilities settled, based on tax rates and laws enacted, or substantively enacted, at the balance sheet date.

Deferred tax assets and liabilities are offset where the Group has a legally enforceable right to offset and where they relate to income taxes levied by the same taxation authority either on an individual Group company or on Group companies in the same tax group that intend, in future periods, to settle current tax liabilities and assets on a net basis or on a gross basis simultaneously.

13. Financial instruments

On initial recognition, financial instruments are measured at fair value. Subsequently they are measured as follows: designated at fair value through profit or loss; amortised cost, the default class for liabilities; fair value through profit or loss, the default class for assets; or financial assets may be designated as at fair value through other comprehensive income. Regular way purchases of financial assets classified as amortised cost are recognised on the settlement date; all other regular way transactions in financial assets are recognised on the trade date.

Designated as at fair value through profit or loss – a financial instrument may be designated as at fair value through profit or loss only if such designation (a) eliminates or significantly reduces a measurement or recognition inconsistency; or (b) applies to a group of financial assets, financial liabilities or both, that the Group manages and evaluates on a fair value basis; or (c) relates to a financial liability that contains an embedded derivative which is not evidently closely related to the host contract. Financial assets that the Group designates on initial recognition as being at fair value through profit or loss are recognised at fair value, with transaction costs being recognised in profit or loss, and are subsequently measured at fair value. Gains and losses are recognised in profit or loss as they arise.

Amortised cost assets – have to meet both the following criteria:

- (a) the asset is held within a business model whose objective is solely to

hold assets to collect contractual cash flows; and

- (b) the contractual terms of the financial asset are solely payments of principal and interest on the outstanding balance.

Amortised cost liabilities – all liabilities that are not subsequently measured at fair value are measured at amortised cost.

Assets designated at fair value through other comprehensive income – An equity instrument may be designated irrevocably at fair value through other comprehensive income. Other assets have to meet both the following criteria:

- (a) the asset is held within a business model whose objective is both to hold assets to collect contractual cash flows and selling financial assets; and
- (b) the contractual terms of the financial asset are solely payments of principal and interest on the outstanding balance.

Fair value through profit or loss – a financial liability is measured at fair value if it arises from: a financial guarantee contract; a commitment to lend at below market rates; an obligation arising from the failed sale of an asset; or a contingent consideration for a business acquisition. Fair value through profit or loss is the default classification for a financial asset.

Reclassifications – financial liabilities cannot be reclassified. Financial assets are only reclassified where there has been a change in the business model.

Fair value – the Group's approach to determining the fair value of financial instruments measured at fair value is set out in the section of Critical accounting policies and key sources of estimation uncertainty entitled Fair value – financial instruments. Further details are given in Note 9 on the accounts.

Business model assessment – business models are assessed at portfolio level, being the level at which they are managed. This is expected to result in the most consistent classification of assets because it aligns with the stated objectives of the portfolio, its risk management, manager's remuneration and the ability to monitor sales of assets from a portfolio. The criteria for classifying cash flows as solely principal and interest are assessed against the contractual terms of a facility, with attention to leverage features; prepayment and extension terms; and triggers that might reset the effective rate of interest.

14. Impairments

At each balance sheet date each financial asset or portfolio of loans measured at amortised cost or at fair value through other comprehensive income, issued financial guarantee and loan commitment is assessed for impairment. Loss allowances are forward looking, based on 12 month expected credit losses where there has not been a significant increase in credit risk rating, otherwise allowances are based on lifetime expected

losses. Loss allowances for lease receivables are always made on a lifetime basis.

Expected credit losses are a probability-weighted estimate of credit losses. The probability is determined by the risk of default which is applied to the cash flow estimates. In the absence of a change in credit rating, allowances are recognised when there is reduction in the net present value of expected cash flows. On a significant increase in credit risk, allowances are recognised without a change in the expected cash flows, although typically expected cash flows do also change; and expected credit losses are rebased from 12 month to lifetime expectations.

On restructuring a financial asset without causing derecognition of the original asset the revised cash flows are used in re-estimating the credit loss. Where restructuring causes derecognition of the original financial asset, the fair value of the replacement asset is used as the closing cash flow of the original asset.

Where, in the course of the orderly realisation of a loan, it is exchanged for equity shares or property, the exchange is accounted for as the sale of the loan and the acquisition of equity securities or investment property. Where the Group's interest in equity shares following the exchange is such that the Group controls an entity, that entity is consolidated.

The costs of loss allowances on assets held at amortised cost are presented as impairments in the income statement. Allowances in respect of financial guarantees and loan commitments are presented in administrative expenses. Financial assets are presented gross of allowances except where the asset has been wholly or partially written off.

Impaired loans and receivables are written off, when the Group concludes that there is no longer any realistic prospect of recovery of part or all of the loan. For loans that are individually assessed for impairment, the timing of write off is determined on a case-by-case basis. Such loans are reviewed regularly and write off will be prompted by bankruptcy, insolvency, renegotiation and similar events.

The typical time frames from initial impairment to write off for the Group's collectively-assessed portfolios are:

- Retail mortgages: write off usually occurs within five years, or when an account is closed if earlier.
- Credit cards: the irrecoverable amount is written off after 12 months; three years later any remaining amounts outstanding are written off. Overdrafts and other unsecured loans: write off occurs within six years.
- Overdrafts and other unsecured loans: write off occurs within six years
- Commercial loans: write offs are determined in the light of individual circumstances; the period does not exceed five years.
- Business loans are generally written off within five years.

15. Financial guarantee contracts

Accounting policies

Under a financial guarantee contract, the Group, in return for a fee, undertakes to meet a customer's obligations under the terms of a debt instrument if the customer fails to do so. A financial guarantee is recognised as a liability; initially at fair value and, if not designated as at fair value through profit or loss, subsequently at the higher of its initial value less cumulative amortisation and any provision under the contract measured in accordance with Accounting policy 14. Amortisation is calculated so as to recognise fees receivable in profit or loss over the period of the guarantee.

16. Derecognition

A financial asset is derecognised when the contractual right to receive cash flows from the asset has expired or when it has been transferred and the transfer qualifies for derecognition. A transfer requires that the Group either (a) transfers the contractual rights to receive the asset's cash flows; or (b) retains the right to the asset's cash flows but assumes a contractual obligation to pay those cash flows to a third party. After a transfer, the Group assesses the extent to which it has retained the risks and rewards of ownership of the transferred asset. The asset remains on the balance sheet if substantially all the risks and rewards have been retained. It is derecognised if substantially all the risks and rewards have been transferred. If substantially all the risks and rewards have been neither retained nor transferred, the Group assesses whether or not it has retained control of the asset. If the Group has retained control of the asset, it continues to recognise the asset to the extent of its continuing involvement; if the Group has not retained control of the asset, it is derecognised.

A financial liability is removed from the balance sheet when the obligation is discharged, or is cancelled, or expires. On the redemption or settlement of debt securities (including subordinated liabilities) issued by the Group, the Group derecognises the debt instrument and records a gain or loss being the difference between the debt's carrying amount and the cost of redemption or settlement. The same treatment applies where the debt is exchanged for a new debt issue that has terms substantially different from those of the existing debt. The assessment of whether the terms of the new debt instrument are substantially different takes into account qualitative and quantitative characteristics including a comparison of the present value of the cash flows under the new terms with the present value of the remaining cash flows of the original debt issue discounted at the effective interest rate of the original debt issue.

17. Sale and repurchase transactions

Securities subject to a sale and repurchase agreement under which substantially all the risks and rewards of ownership are retained by the Group continue to be shown on the balance sheet and the sale proceeds recorded as a financial liability. Securities acquired in a reverse sale and repurchase transaction under which the Group is not exposed to substantially all the risks and

rewards of ownership are not recognised on the balance sheet and the consideration paid is recorded as a financial asset.

Securities borrowing and lending transactions are usually secured by cash or securities advanced by the borrower. Borrowed securities are not recognised on the balance sheet or lent securities derecognised.

Cash collateral given or received is treated as a loan or deposit; collateral in the form of securities is not recognised. However, where securities borrowed are transferred to third parties, a liability for the obligation to return the securities to the stock lending counterparty is recorded.

18. Netting

Financial assets and financial liabilities are offset and the net amount presented in the balance sheet when, and only when, the Group currently has a legally enforceable right to set off the recognised amounts and it intends either to settle on a net basis or to realise the asset and settle the liability simultaneously. The Group is party to a number of arrangements, including master netting agreements, that give it the right to offset financial assets and financial liabilities, but where it does not intend to settle the amounts net or simultaneously, the assets and liabilities concerned are presented gross.

19. Capital instruments

The Group classifies a financial instrument that it issues as a liability if it is a contractual obligation to deliver cash or another financial asset, or to exchange financial assets or financial liabilities on potentially unfavourable terms and as equity if it evidences a residual interest in the assets of the Group after the deduction of liabilities. The components of a compound financial instrument issued by the Group are classified and accounted for separately as financial assets, financial liabilities or equity as appropriate.

Incremental costs and related tax that are directly attributable to an equity transaction are deducted from equity.

The consideration for any ordinary shares of the company purchased by the Group (treasury shares) is deducted from equity. On the cancellation of treasury shares their nominal value is removed from equity and any excess of consideration over nominal value is treated in accordance with the capital maintenance provisions of the Companies Act. On the sale or reissue of treasury shares the consideration received and related tax are credited to equity, net of any directly attributable incremental costs.

20. Derivatives and hedging

In accordance with IAS 39 'Hedge relationships', derivative financial instruments are initially recognised, and subsequently measured, at fair value. The Group's approach to determining the fair value of financial instruments is set out in the section of Critical accounting policies and key sources of estimation uncertainty entitled Fair value -

financial instruments; further details are given in Note 12 on the accounts.

A derivative embedded in a contract is accounted for as a stand-alone derivative if its economic characteristics are not closely related to the economic characteristics of the host contract; unless the host is a financial asset or the entire contract is measured at fair value with changes in fair value recognised in profit or loss.

Gains and losses arising from changes in the fair value of derivatives that are not the hedging instrument in a qualifying hedge are recognised as they arise in profit or loss. Gains and losses are recorded in Income from trading activities except for gains and losses on those derivatives that are managed together with financial instruments designated at fair value; these gains and losses are included in Other operating income. The Group enters into three types of hedge relationship: hedges of changes in the fair value of a recognised asset or liability or unrecognised firm commitment (fair value hedges); hedges of the variability in cash flows from a recognised asset or liability or a highly probable forecast transaction (cash flow hedges); and hedges of the net investment in a foreign operation.

Hedge relationships are formally designated and documented at inception. The documentation identifies the hedged item and the hedging instrument and details the risk that is being hedged and the way in which effectiveness will be assessed at inception and during the period of the hedge. If the hedge is not highly effective in offsetting changes in fair values or cash flows attributable to the hedged risk, consistent with the documented risk management strategy, hedge accounting is discontinued. Hedge accounting is also discontinued if the Group revokes the designation of a hedge relationship.

Fair value hedge - in a fair value hedge, the gain or loss on the hedging instrument is recognised in profit or loss. The gain or loss on the hedged item attributable to the hedged risk is recognised in profit or loss and, where the hedged item is measured at amortised cost, adjusts the carrying amount of the hedged item. Hedge accounting is discontinued if the hedge no longer meets the criteria for hedge accounting; or if the hedging instrument expires or is sold, terminated or exercised; or if hedge designation is revoked. If the hedged item is one for which the effective interest rate method is used, any cumulative adjustment is amortised to profit or loss over the life of the hedged item using a recalculated effective interest rate.

Cash flow hedge - in a cash flow hedge, the effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income and the ineffective portion in profit or loss. When the forecast transaction results in the recognition of a financial asset or financial liability, the cumulative gain or loss is reclassified from equity to profit or loss in the same periods in

Accounting policies

which the hedged forecast cash flows affect profit or loss. Otherwise the cumulative gain or loss is removed from equity and recognised in profit or loss at the same time as the hedged transaction. Hedge accounting is discontinued if the hedge no longer meets the criteria for hedge accounting; if the hedging instrument expires or is sold, terminated or exercised; if the forecast transaction is no longer expected to occur; or if hedge designation is revoked. On the discontinuance of hedge accounting (except where a forecast transaction is no longer expected to occur), the cumulative unrealised gain or loss is reclassified from equity to profit or loss when the hedged cash flows occur or, if the forecast transaction results in the recognition of a financial asset or financial liability, when the hedged forecast cash flows affect profit or loss. Where a forecast transaction is no longer expected to occur, the cumulative unrealised gain or loss is reclassified from equity to profit or loss immediately.

Hedge of net investment in a foreign operation – in the hedge of a net investment in a foreign operation, the portion of foreign exchange differences arising on the hedging instrument determined to be an effective hedge is recognised in other comprehensive income. Any ineffective portion is recognised in profit or loss. Non-derivative financial liabilities as well as derivatives may be the hedging instrument in a net investment hedge. On disposal or partial disposal of a foreign operation, the amount accumulated in equity is reclassified from equity to profit or loss.

21. Share-based compensation

The Group operates a number of share-based compensation schemes under which it awards RBSG shares and share options to its employees. Such awards are generally subject to vesting conditions: conditions that vary the amount of cash or shares to which an employee is entitled. Vesting conditions include service conditions (requiring the employee to complete a specified period of service) and performance conditions (requiring the employee to complete a specified period of service and specified performance targets to be met). Other conditions to which an award is subject are non-vesting conditions (such as a requirement to save throughout the vesting period).

The cost of employee services received in exchange for an award of shares or share options is measured by reference to the fair value of the shares or share options on the date the award is granted and takes into account non-vesting conditions and market performance conditions (conditions related to the market price of RBSG shares): an award is treated as vesting irrespective of whether any market performance condition or non-vesting condition is met. The fair value of options granted is estimated using valuation techniques which incorporate exercise price, term, risk-free interest rates, the current share price and its expected volatility. The cost is expensed on a straight-line basis over the vesting period (the period during which all the specified vesting conditions must be satisfied) with a corresponding increase in equity in an

equity-settled award, or a corresponding liability in a cash-settled award. The cost is adjusted for vesting conditions (other than market performance conditions) so as to reflect the number of shares or share options that actually vest. If an award is modified, the original cost continues to be recognised as if there had been no modification. Where modification increases the fair value of the award, this increase is recognised as an expense over the modified vesting period. A new award of shares or share options is treated as the modification of a cancelled award if, on the date the new award is granted, the Group identifies them as replacing the cancelled award. The cancellation of an award through failure to meet non-vesting conditions triggers an immediate expense for any unrecognised element of the cost of an award.

22. Cash and cash equivalents

In the cash flow statement, cash and cash equivalents comprises cash and deposits with banks with an original maturity of less than three months together with short-term highly liquid investments that are readily convertible to known amounts of cash and subject to insignificant risk of change in value.

23. Shares in Group entities

The Bank's investments in its subsidiaries are stated at cost less any impairment.

Critical accounting policies and key sources of estimation uncertainty

The reported results of the Group are sensitive to the accounting policies, assumptions and estimates that underlie the preparation of its financial statements. UK company law and IFRS require the directors, in preparing the Group's financial statements, to select suitable accounting policies, apply them consistently and make judgements and estimates that are reasonable and prudent. In the absence of an applicable standard or interpretation, IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors', requires management to develop and apply an accounting policy that results in relevant and reliable information in the light of the requirements and guidance in IFRS dealing with similar and related issues and the IASB's 'Conceptual Framework for Financial Reporting'. The judgements and assumptions involved in the Group's accounting policies that are considered by the Board to be the most important to the portrayal of its financial condition are discussed below. The use of estimates, assumptions or models that differ from those adopted by the Group would affect its reported results

Critical accounting policy	Note
Deferred tax	7
Fair value: financial instruments	12
Loan impairment provisions	14
Provisions for liabilities and charges	20

Accounting developments International Financial Reporting Standards

A number of IFRSs and amendments to IFRS were in issue at 31 December 2018 that would affect RBS Group from 1 January 2019 or later.

Effective 1 January 2019

IFRS 16 'Leases' was issued in January 2016 to replace IAS 17 'Leases'. The Group will apply the standard with effect from 1 January 2019. Lessees will capitalise operating leases through the recognition of assets representing the contractual rights of use. The present value of contractual payments will be recognised as lease liabilities.

The Group has new models and processes to implement IFRS 16. The most significant impact from initially applying IFRS 16 will be to recognise rights of use assets in respect of branches and office properties leased by the Group under contracts classified as operating leases under IAS 17. The present value of other contracts is immaterial. The Group will apply IFRS 16 on a modified retrospective basis without restating prior years and electing for the following exemptions on transition at 1 January 2019. The Group will

- apply IFRS 16 to contracts previously identified as leases by IAS 17
- use the incremental borrowing rate as the discount rate
- not apply IFRS 16 to operating leases with a remaining lease term of less than 12 months or low value leases (non property leases)
- rely on the assessment of whether the lease contract is onerous under IAS 37 at 31 December 2018 as an alternative to performing an impairment review of the right of use assets created on 1 January 2019 Where this is the case the carrying amount of the assets will be adjusted by the onerous lease provision.
- exclude initial direct costs from the measurement of the right of use asset

The opening balance sheet of the Group at 1 January 2019 will be adjusted to create a right of use asset of approximately £56 million. A lease liability will also be recognised of £62 million. Retained earnings will decrease by £6 million after tax.

The opening balance sheet of the Bank at 1 January 2019 will be adjusted to create a right of use asset of approximately £21 million. A lease liability will also be recognised of £27 million. Retained earnings will decrease by £6 million after tax.

Application of IFRS 16 by the Group is not expected to have a significant impact on lessor accounting or for finance lease accounting by lessees.

Effective after 2019

IFRS 17 'Insurance contracts' was issued in May 2017 to replace IFRS 4 and to establish a comprehensive standard for inceptors of insurance policies. The effective date is 1 January 2021, subject to IASB's approval of a deferral until 1 January 2022

In February 2018 the IASB amended IAS 19 'Employee Benefits' to clarify the need to update assumptions whenever there is a plan amendment, curtailment or settlement.

The Group is assessing the effect of adopting these standards on its financial statements.

Notes on the accounts

1 Net interest income

	2018 £m	2017 £m
Loans to banks - amortised cost	66	10
Loans to customers - amortised cost	248	192
Other financial assets	92	68
Interest receivable (1)	406	270
Balances with banks	63	8
Customer deposits	54	10
Other financial liabilities	556	204
Interest payable (1)	673	222
	(267)	48

2 Non-interest income

	2018 £m	2017 £m
Net fees and commissions	27	7
Income from trading activities		
Foreign exchange	387	378
Interest rate	515	249
Credit	41	144
Changes in fair value of own debt attributable to own credit		
- debt securities in issue and derivative liabilities	92	(70)
Equities and other	10	36
	1,045	737
Gain on redemption of own debt	101	—
Other operating income		
Operating lease and other rental income	14	8
Changes in the fair value of financial assets and liabilities designated at fair value through profit or loss	(16)	(11)
Changes in fair value of other financial assets fair value through profit or loss	(46)	—
Hedge ineffectiveness	(1)	—
Loss on disposal of amortised cost assets	(73)	(38)
Loss/(profit) on disposal of fair value through other comprehensive income assets	(8)	61
Profit on sale of property, plant and equipment	1	—
Dividend income	7	—
Share of profits of associated entities	—	1
(Loss)/profit on disposal of subsidiaries and associates	(12)	81
Other income (2)	86	17
	(48)	119

Notes:

(1) Negative interest on Loans to banks is classed as interest payable and on Customer deposits is classed as interest receivable.

(2) Includes income from activities other than banking. 2018 includes insurance recoveries of £140 million.

Notes on the accounts

3 Operating expenses

	2018 £m	2017 £m
Wages, salaries and other staff costs	477	719
Social security costs	49	58
Variable compensation	42	111
Pension costs	11	6
Staff costs	579	894
Premises and equipment	120	152
Depreciation and amortisation	14	(49)
Other administrative expenses (1)	1,524	1,389
Administrative expenses	1,658	1,492
	2,237	2,386

Note:

(1) Includes litigation and conduct costs. Further details are provided in Note 20.

The average number of persons employed, rounded to the nearest hundred, in continuing operations during the year, excluding temporary staff, was 4,700⁽¹⁾ (2017 – 3,400); on the same basis there were 20,900 people employed in discontinued operations (2017 – 69,100). The number of persons employed by the Group in continuing operations at 31 December 2018, excluding temporary staff, was as follows:

	2018	2017
UK	2,100	2,100
USA	500	500
Europe	300	500
Rest of the World (1)	1,600	2,200
Total	4,500	5,300

Note:

(1) In 2018, Rest of the World included 1,300 central and support staff who are currently paid by National Westminster Bank Plc, with related costs recharged to the Group. These staff are not included in the average number of persons employed.

There were no people employed in discontinued operations at 31 December 2018 (2017 – 62,800).

Variable compensation awards

The following tables analyse the Group's variable compensation awards for 2018.

	2018 £m	2017 £m	Change %
Non-deferred cash awards (2)	7	6	17
Total non-deferred variable compensation	7	6	17
Deferred bond awards	58	29	100
Deferred share awards	67	87	(23)
Total deferred variable compensation	125	116	8
Total variable compensation (3)	132	122	8

Reconciliation of variable compensation awards to income statement charge

	2018 £m	2017 £m	2016 £m
Variable compensation awarded	132	122	104
Less: deferral of charge for amounts awarded for current year	(65)	(60)	(37)
Income statement charge for amounts awarded in current year	67	62	67
Add: current year charge for amounts deferred from prior years	34	56	95
Less: forfeiture of amounts deferred from prior years	(59)	(7)	(106)
Income statement charge for amounts deferred from prior years	(25)	49	(11)
Income statement charge for variable compensation (3)	42	111	56

Notes:

(1) The tables above relate to continuing businesses only.

(2) Cash awards are limited to £2,000 for all employees.

(3) Excludes other performance related compensation.

Notes on the accounts

4 Segmental analysis

Reportable operating segments

The reportable operating segments are as follows:

NatWest Markets offers its customers global market access, providing them with trading, risk management and financing solutions through its trading and sales operations in London, Singapore and Stamford and sales offices in Dublin, Hong Kong and Tokyo.

Central items & other includes balances in relation to legacy litigation issues, interest expense associated with certain Treasury liabilities for the period prior to transfer to the NatWest Markets segment, disposal groups in the relevant periods and other assets not managed by the NatWest Markets segment.

	Net interest income (1) £m	Net fees and commissions £m	Other non-interest income £m	Total income £m	Operating expenses £m	Depreciation and amortisation £m	Impairment releases £m	Operating loss £m
2018								
NatWest Markets	5	32	981	1,018	(1,381)	(14)	88	(289)
Central items & other	(272)	(5)	117	(160)	(842)	—	14	(988)
Total	(267)	27	1,098	858	(2,223)	(14)	102	(1,277)

2017								
NatWest Markets	215	8	817	1,040	(1,914)	49	79	(746)
Central items & other	(167)	(1)	39	(129)	(521)	—	—	(650)
Total	48	7	856	911	(2,435)	49	79	(1,396)

Note:

- (1) Includes interest payable of £673 million and interest receivable of £406 million in relation to the Group (2017 - £222 million and £270 million respectively). Within the NatWest Markets segment net interest income comprises interest receivable on external lending activities, offset by net interest payable on external funding activity managed by NatWest Markets Treasury and inter-segmental charges. Net interest expense in Central items & other predominantly comprises external interest costs associated with RBS Group Treasury managed liabilities and the impact of inter-segmental income.

	2018	2017
	Total £m	Total £m
Total revenue		
NatWest Markets	2,357	2,005
Central items & other	(593)	(597)
Total	1,764	1,408

	2018			2017		
	NatWest Markets £m	Central items & other £m	Total £m	NatWest Markets £m	Central items & other £m	Total £m
Analysis of net fees and commissions						
Fees and commissions receivable						
- Payment services	3	—	3	1	—	1
- Lending (credit facilities)	87	—	87	84	—	84
- Brokerage	80	—	80	63	—	63
- Investment management, trustee and fiduciary services	—	—	—	1	—	1
- Trade finance	3	—	3	3	—	3
- Underwriting fees	141	—	141	139	—	139
- Other	72	(126)	(54)	131	(140)	(9)
Total	386	(126)	260	422	(140)	282
Fees and commissions payable	(354)	121	(233)	(414)	139	(275)
Net fees and commissions	32	(5)	27	8	(1)	7

Notes on the accounts

4 Segmental analysis continued

	2018		2017	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
NatWest Markets	245,060	236,121	262,432	248,427
Central items & other	2,821	2,671	463,805	442,550
Total	247,881	238,792	726,237	690,977

Geographical segments

The geographical analysis in the tables below has been compiled on the basis of location of office where the transactions are recorded.

2018	UK £m	USA £m	Europe £m	ROW £m	Total £m
Total revenue	1,512	195	(46)	103	1,764
Net interest income	(288)	—	5	16	(267)
Net fees and commissions	(46)	12	—	61	27
Income from trading activities	931	106	—	8	1,045
Other operating income	19	36	(7)	5	53
Total income	616	154	(2)	90	858
Operating profit/(loss) before tax	(1,168)	(129)	(15)	35	(1,277)
Total assets	212,755	32,637	1,061	1,428	247,881
Total liabilities	206,305	31,436	88	963	238,792
Net assets attributable to equity shareholders and non-controlling interests	6,450	1,201	973	465	9,089
Contingent liabilities and commitments	10,884	—	31	208	11,123
2017					
Total revenue	1,096	179	19	114	1,408
Net interest income	27	1	7	13	48
Net fees and commissions	(150)	96	7	54	7
Income from trading activities	647	83	—	7	737
Other operating income	79	16	—	24	119
Total income	603	196	14	98	911
Operating loss before tax	(1,296)	(6)	(89)	(5)	(1,396)
Total assets	658,540	38,536	27,457	1,704	726,237
- of which assets held for sale	432,478	3,554	27,189	657	463,878
Total liabilities	633,389	36,655	19,839	1,094	690,977
- of which liabilities held for sale	412,491	484	19,807	50	432,832
Net assets attributable to equity shareholders and non-controlling interests	25,151	1,881	7,618	610	35,260
Contingent liabilities and commitments	12,696	78	26	22	12,822

Notes on the accounts

5 Pensions

Defined contribution schemes

The Group sponsors a number of defined contribution pension schemes in different territories, which new employees are offered the opportunity to join.

Defined benefit schemes

The Group sponsors a number of pension schemes in the UK and overseas, including the AA and NatWest Markets (NWM) sections of The Royal Bank of Scotland Group Pension Fund which operate under UK trust law and are managed and administered on behalf of their members in accordance with the terms of the trust deed, the scheme rules and UK legislation.

The NWM section was established on 1 November 2018. It received the pension assets and liabilities relating to the members of the Main section employed by the Group and inherited the IFRS asset ceiling. No consideration was paid and any liability of the Group to the Main section was extinguished.

Pension fund trustees are appointed to operate each fund and ensure benefits are paid in accordance with the scheme rules and national law. The trustees are the legal owner of a scheme's assets, and have a duty to act in the best interests of all scheme members.

The schemes generally provide a pension of one-sixtieth of final pensionable salary for each year of service prior to retirement up to a maximum of 40 years and are contributory for current members. These have been closed to new entrants for over ten years, although current members continue to build up additional pension benefits, currently subject to 2% maximum annual salary inflation while they remain employed by the Group.

The corporate trustee is RBS Pension Trustee Limited (the Trustee), a wholly owned subsidiary of National Westminster Bank Plc. The Board of the Trustee comprises four member trustee directors selected from eligible active staff, deferred and pensioner members who apply and six appointed by the Group. Under UK legislation, a defined benefit pension scheme is required to meet the statutory funding objective of having sufficient and appropriate assets to cover its liabilities (the pensions that have been promised to members).

Investment strategy

The assets of the AA section, which is typical of other Group schemes, represent 76% of the continuing plan assets at 31 December 2018 (2017 – 91%), are invested in a diversified portfolio as shown below.

The AA and NWM sections employ derivative instruments to achieve a desired asset class exposure and to reduce the scheme's interest rate, inflation and currency risk. This means that the net funding position is considerably less sensitive to changes in market conditions than the value of the assets or liabilities in isolation.

Derivatives have been executed at prevailing market rates and within standard market bid/offer spreads with a number of counterparty banks, including NatWest Markets Plc.

	2018			2017		
	Quoted %	Unquoted %	Total %	Quoted %	Unquoted %	Total %
Major classes of plan assets as a percentage of total plan assets of the AA section						
Equities	2.1	0.9	3.0	7.2	1.2	8.4
Index linked bonds	43.2	—	43.2	49.8	—	49.8
Government bonds	1.6	—	1.6	5.5	—	5.5
Corporate and other bonds	30.5	4.9	35.4	17.8	—	17.8
Real estate	—	1.9	1.9	—	4.2	4.2
Derivatives	—	3.3	3.3	—	7.2	7.2
Cash and other assets	—	11.6	11.6	—	7.1	7.1
	77.4	22.6	100.0	80.3	19.7	100.0

Notes on the accounts

5 Pensions continued

The schemes do not invest directly in the Group but can have exposure to the Group. The trustees are responsible for ensuring that indirect investments in the Group do not exceed the 5% regulatory limit.

	AA section			All schemes			
	Fair value of plan assets	Present value of defined benefit obligation	Net pension liability/(asset)	Fair value of plan assets	Present value of defined benefit obligation	Asset ceiling/minimum funding (1)	Net pension liability/(asset)
	£m	£m	£m	£m	£m	£m	£m
Changes in value of net pension liability/(asset)							
At 1 January 2017	1,149	892	(257)	48,438	43,177	5,315	54
Currency translation and other adjustments	—	—	—	47	47	3	3
Income statement	30	24	(6)	1,263	1,488	142	367
Statement of comprehensive income	30	4	(26)	1,683	(8)	1,628	(63)
Transfers to/from fellow subsidiaries	—	—	—	3	35	—	32
Contributions by employer	1	—	(1)	621	—	—	(621)
Contributions by plan participants and other scheme members	—	—	—	10	10	—	—
Liabilities extinguished upon settlement	—	—	—	(744)	(755)	—	(11)
Benefits paid	(53)	(53)	—	(2,364)	(2,364)	—	—
Transfer to disposal groups	—	—	—	(47,685)	(40,594)	(7,088)	3
At 1 January 2018	1,157	867	(290)	1,272	1,036	—	(236)
Currency translation and other adjustments	—	—	—	4	4	—	—
Income statement							
Net interest expense	29	21	(8)	36	31	—	(5)
Current service cost	—	1	1	—	7	—	7
Loss on curtailments or settlements	—	—	—	—	4	—	4
	29	22	(7)	36	42	—	6
Statement of comprehensive income							
Return on plan assets above recognised interest income	(50)	—	50	(64)	—	—	64
Experience gains and losses	—	1	1	—	—	—	—
Effect of changes in actuarial financial assumptions	—	(53)	(53)	—	(63)	—	(63)
Effect of changes in demographic assumptions	—	9	9	—	15	—	15
Asset ceiling adjustments:							
Attributable to contributions required by ring fencing (2)	—	—	—	—	—	53	53
Other movements in the year	—	—	—	—	—	(14)	(14)
	(50)	(43)	7	(64)	(48)	39	55
Transfers to/from fellow subsidiaries	—	—	—	28	19	7	(2)
Contributions by employer	1	—	(1)	7	—	—	(7)
Benefits paid	(86)	(86)	—	(97)	(97)	—	—
Transfer of pension assets and liabilities from Main section (3)	—	—	—	202	151	51	—
At 31 December 2018	1,051	760	(291)	1,388	1,107	97	(184)

Notes:

- (1) In recognising the net surplus or deficit of a pension scheme, the funded status of each scheme is adjusted to reflect any minimum funding requirement imposed on the sponsor and any ceiling on the amount that the sponsor has an unconditional right to recover from a scheme.
- (2) NatWest Markets Plc is required to make a £53 million contribution to the NWM section in Q1 2019. This has been recorded as a funding requirement in the Statement of Comprehensive Income on page 61.
- (3) Due to ring-fencing requirements, NatWest Markets Plc cannot continue to be a participant in the Main section. As a result on 1 November 2018, assets and liabilities of the Group's active members of the Main section were transferred into a newly established section of the RBS Group Pension Fund, the NatWest Markets (NWM) section.
- (4) The Group expects to make contributions to the AA section of £2 million and to the NWM section of £59 million, including the £53 million funding requirement, in 2019.

	All schemes	
	2018	2017
	£m	£m
Amounts recognised on the balance sheet		
Fund assets at fair value	1,388	1,272
Present value of fund liabilities	1,107	1,036
Funded status	281	236
Asset ceiling/minimum funding	97	—
	184	236

	2018	2017
	£m	£m
Net pension asset/(liability) comprises		
Net assets of schemes in surplus (included in Other assets, Note 17)	299	290
Net liabilities of schemes in deficit (included in Other liabilities, Note 20)	(115)	(54)
	184	236

The income statement charge comprises:

	2018	2017
	£m	£m
Continuing operations	6	(7)
Discontinued operations	81	374
	87	367

Notes on the accounts

5 Pensions continued

Funding and contributions by the Group

In the UK, the trustees of defined benefit pension schemes are required to perform funding valuations every three years. The trustees and the sponsoring company, with the support of the Scheme Actuary, agree the assumptions used to value the liabilities and a Schedule of Contributions required to eliminate any funding deficit. The funding assumptions incorporate a margin for prudence over and above the expected cost of providing the benefits promised to members, taking into account the sponsor's covenant and the investment strategy of the scheme. Similar arrangements apply in the other territories where the Group sponsors defined benefit pension schemes. The last funding valuation of the AA section was at 31 December 2017 and next funding valuation is due at 31 December 2020, to be agreed by 31 March 2022.

The triennial funding valuation of the AA section as at 31 December 2017 determined the funding level to be 109%, pension liabilities to be £1,063 million and the surplus to be £98 million.

The most significant assumptions used for the AA section are shown below:

The first triennial funding valuation of the NWM section will be carried out as at 31 December 2018. The Group expect to make a contribution of £53m to the NWM section during 2019 to bring its funding level in line with that of the AA Section.

Assumptions

Placing a value on the Group's defined benefit pension schemes' liabilities requires the Group's management to make a number of assumptions, with the support of independent actuaries. The ultimate cost of the defined benefit obligations depends upon actual future events and the assumptions made are unlikely to be exactly borne out in practice, meaning the final cost may be higher or lower than expected.

	Principal IAS 19 actuarial assumptions		Principal assumptions of AA section
	2018 %	2017 %	2017 triennial valuation 2017
Discount rate	2.9	2.6	Fixed interest gilt yield curve plus 0.4% per annum RPI gilt yield curve
Inflation assumption (RPI)	3.2	3.1	
Rate of increase in salaries	1.8	1.8	
Rate of increase in deferred pensions	2.1	2.1	
Rate of increase in pensions in payment	3.0	2.9	Modelled allowance for relevant caps and floors
Lump sum conversion rate at retirement	18	12	
Longevity at age 60:	Years	Years	
Current pensioners			
Males	28.2	28.3	28.8
Females	29.6	29.7	30.3
Future pensioners, currently aged 40			
Males	29.3	29.5	30.4
Females	31.6	31.7	32.3

Discount rate

The IAS 19 valuation uses a single discount rate by reference to the yield on a basket of 'high quality' sterling corporate bonds. For the triennial valuation discounting is by reference to a yield curve.

The weighted average duration of the AA section's defined benefit obligation at 31 December 2018 is 20 years (2017 – 21 years).

Significant judgement is required when setting the criteria for bonds to be included in IAS 19's basket of bonds that determines the discount rate used in the valuations. The criteria includes issue size, quality of pricing and the exclusion of outliers. Judgement is also required in determining the shape of the yield curve at long durations: a constant credit spread relative to gilts is assumed. Sensitivity to the main assumptions is presented below.

Notes on the accounts

5 Pensions continued

The table below analyses the change in the present value of the defined benefit obligation if the key assumptions were to change. The sensitivity analysis presented below may not be representative of the actual change in the defined benefit obligation as it is unlikely that the changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	AA Section (decrease)/ increase in value of assets £m	AA Section (decrease)/ increase in value of liabilities £m	AA Section increase in net pension assets/ (obligations) £m
2018			
0.25% increase in interest rates/discount rate	(54)	(36)	(18)
0.25% increase in inflation	46	26	20
0.25% increase in credit spreads	—	(36)	36
Longevity increase of one year	—	28	(28)
0.25% additional rate of increase in pensions in payment	—	30	(30)
Increase in equity values of 10% ⁽¹⁾	2	—	2
2017			
0.25% increase in interest rates/discount rate	(58)	(45)	(13)
0.25% increase in inflation	39	32	7
0.25% increase in credit spreads	—	(45)	45
Longevity increase of one year	—	29	(29)
0.25% additional rate of increase in pensions in payment	—	33	(33)
Increase in equity values of 10% ⁽¹⁾	24	—	24

Note:

(1) Includes both quoted and private equity.

The defined benefit obligation is attributable to the different classes of AA section members in the following proportions:

Membership category	2018 %	2017 %
Active members	2.6	3.7
Deferred members	61.8	63.0
Pensioner and dependants	35.6	33.3
	100.0	100.0

The experience history of the AA section is shown below:

History of defined benefit schemes	2018 £m	2017 £m
Fair value of plan assets	1,051	1,157
Present value of plan obligations	760	867
Net surplus	291	290
Experience losses on plan liabilities	(1)	(3)
Experience (losses)/gains on plan assets	(50)	30
Actual return on plan assets	(21)	60
Actual return on plan assets - %	(1.8%)	5.2%

Notes on the accounts

6 Auditor's remuneration

Amounts paid to the Group's auditors for statutory audit and other services are set out below:

	2018 £m	2017 £m
Fees payable for the audit of the Group's annual accounts	7.5	7.0
Fees payable to the auditor and its associates for other services to the Group		
- the audit of the Bank's subsidiaries pursuant to legislation	2.7	9.5
Total audit and audit-related assurance service fees	10.2	16.5

Fees payable to the auditor for non-audit services are disclosed in the consolidated financial statements of The Royal Bank of Scotland Group plc.

7 Tax

	2018 £m	2017 £m
Current tax		
(Charge)/credit for the year	(6)	28
Over provision in respect of prior years	111	53
	105	81
Deferred tax		
(Charge)/credit for the year	(18)	125
Reduction in the carrying value of deferred tax assets	—	(30)
Under provision in respect of prior year	(54)	(16)
Tax credit for the year	33	160

The actual tax credit differs from the expected tax credit computed by applying the standard rate of UK corporation tax of 19% (2017 – 19.25%) as follows:

	2018 £m	2017 £m
Expected tax credit	243	269
Losses and temporary differences in year where no deferred tax asset recognised	(1)	(265)
Foreign profits taxed at other rates	(16)	119
UK tax rate change impact ⁽¹⁾	5	(7)
Items not allowed for tax		
- losses on disposal and write-downs ⁽²⁾	(57)	(27)
- regulatory and legal actions	(169)	7
- other disallowable items	(43)	(19)
Non-taxable items	11	19
Losses brought forward and utilised	11	—
Reduction in carrying value of deferred tax asset in respect of		
- UK losses	—	(30)
Banking surcharge	(8)	57
Adjustments in respect of prior years ⁽³⁾	57	37
Actual tax credit	33	160

Notes:

- (1) In recent years, the UK government has steadily reduced the rate of UK corporation tax, with the latest enacted rates standing at 19% with effect from 1 April 2017 and 17% from 1 April 2020.
- (2) Principally related to non-deductible transfers to the wider RBS Group in preparation for ring-fencing.
- (3) Prior year tax adjustments incorporate refinements to tax computations made on submission and agreement with the tax authorities. Current taxation balances include provisions in respect of uncertain tax positions, in particular in relation to restructuring and other costs where the taxation treatment remains subject to agreement with the relevant tax authorities.

Judgment: Tax contingencies

The Group's income tax charge and its provisions for income taxes necessarily involves a significant degree of estimation and judgement. The tax treatment of some transactions is uncertain and tax computations are yet to be agreed with the tax authorities in a number of jurisdictions. The Group recognises anticipated tax liabilities based on all available evidence and, where appropriate, in the light of external advice. Any difference between the final outcome and the amounts provided will affect current and deferred income tax charges in the period when the matter is resolved.

Notes on the accounts

7 Tax continued

Deferred tax

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Deferred tax asset	—	(166)	—	(165)
- disposal groups	—	(1,585)	—	(356)
	—	(1,751)	—	(521)
Deferred tax liability	487	128	446	100
- disposal groups	—	274	—	—
	487	402	446	100
Net deferred tax liability/(asset)	487	(1,349)	446	(421)

Net deferred tax liability/(asset) comprised:

	Group						
	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2017	(666)	359	(335)	343	(1,050)	76	(1,273)
Acquisitions and disposals of subsidiaries	5	(26)	—	—	—	—	(21)
Charge/(credit) to income statement							
- continuing operations	4	(148)	14	23	57	(29)	(79)
- discontinued operations	(1)	22	44	(130)	64	—	(1)
Charge/(credit) to other comprehensive income	276	—	—	(198)	—	(19)	59
Currency translation and other adjustments	(5)	(16)	(2)	—	(10)	(1)	(34)
At 1 January 2018	(387)	191	(279)	38	(939)	27	(1,349)
Implementation of IFRS9 on 1 January 2018	—	—	—	16	—	—	16
Acquisitions and disposals of subsidiaries	872	247	101	(78)	814	(77)	1,879
(Credit)/charge to income statement							
- continuing operations	(6)	—	129	(19)	(26)	(6)	72
- discontinued operations	—	40	—	306	—	41	387
(Credit)/charge to other comprehensive income	(412)	—	(16)	(122)	—	32	(518)
At 31 December 2018	67	478	(65)	141	(151)	17	487

	Bank						
	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2017	50	(109)	(261)	184	(182)	46	(272)
Charge/(credit) to income statement							
- continuing operations	4	—	14	—	57	(25)	50
- discontinued operations	—	74	24	(230)	—	4	(128)
Charge/(credit) to other comprehensive income	35	—	—	(83)	—	(18)	(66)
Currency translations and other adjustments	—	—	—	—	—	(5)	(5)
At 1 January 2018	89	(35)	(223)	(129)	(125)	2	(421)
Implementation of IFRS 9 on 1 January 2018	—	—	—	121	—	—	121
Acquisitions and disposals of subsidiaries	—	440	45	(150)	—	(22)	313
(Credit)/charge to income statement							
- continuing operations	(6)	—	128	(20)	(26)	4	80
- discontinued operations	—	35	—	344	—	1	380
(Credit)/charge to other comprehensive income	(15)	—	(15)	(28)	—	32	(26)
Currency translations and other adjustments	—	—	—	—	—	(1)	(1)
At 31 December 2018	68	440	(65)	138	(151)	16	446

Notes on the accounts

7 Tax continued

Deferred tax assets in respect of unused tax losses are recognised if the losses can be used to offset probable future taxable profits after taking into account the expected reversal of other temporary differences. Recognised deferred tax assets in respect of tax losses are analysed below.

	2018 £m	2017 £m
UK tax losses carried forward		
- NatWest Markets plc	151	125

Critical accounting policy: Deferred tax

The deferred tax liability of £487 million at 31 December 2018 (2017 – net asset of £38 million) includes a deferred tax asset on losses of £151 million. The deferred tax asset recognised on UK losses is recognised to the extent that it is probable that there will be future taxable profits to recover it.

Judgment - The Group has considered the carrying value of deferred tax assets and concluded that, based on management's estimates, sufficient taxable profits will be generated in future years to recover recognised deferred tax assets.

Estimate - These estimates are partly based on forecast performance beyond the horizon for management's detailed plans. They have regard to inherent uncertainties, such as Brexit and climate change.

UK tax losses - Under UK tax rules, tax losses can be carried forward indefinitely. As the recognised tax losses in the Group arose prior to 1 April 2015, credit in future periods is given against 25% of profits at the main rate of UK corporation tax, excluding the Banking Surcharge 8% rate introduced by The Finance (No. 2) Act 2015. Deferred tax assets and liabilities at 31 December 2018 take into account the reduced rates in respect of tax losses and temporary differences and where appropriate, the banking surcharge inclusive rate in respect of other banking temporary differences.

NatWest Markets Plc - NatWest Markets Plc expects that the balance of recognised deferred tax asset at 31 December 2018 of £151 million in respect of tax losses amounting to approximately £800 million will be recovered by the end of 2024. Since 2012 NatWest Markets Plc has reported mixed levels of taxable profits and losses because core banking profitability was offset by a series of restructuring plans as the group reshaped to meet commercial and regulatory demands. In total, £10.2 billion of losses have not been recognised in the deferred tax balance at 31 December 2018; such losses will be available to offset 25% of future taxable profits in excess of those forecast in the closing deferred tax asset.

Unrecognised deferred tax

Deferred tax assets of £3,398 million (2017 - £3,873 million) have not been recognised in respect of tax losses and other temporary differences carried forward of £15,315 million (2017 - £16,825 million) in jurisdictions where doubt exists over the availability of future taxable profits. Of these losses and other temporary differences, £132 million expire within five years and £4,993 million thereafter. The balance of tax losses and other temporary differences carried forward has no expiry date.

Deferred tax liabilities of £3 million (2017 - £nil) have not been recognised in respect of retained earnings of overseas subsidiaries and held-over gains on the incorporation of overseas branches. Retained earnings of overseas subsidiaries are expected to be reinvested indefinitely or remitted to the UK free from further taxation. No taxation is expected to arise in the foreseeable future in respect of held-over gains. Changes to UK tax legislation largely exempts from UK tax, overseas dividends received on or after 1 July 2009.

8 Profit/(loss) dealt with in the accounts of the Bank

As permitted by section 408(3) of the Companies Act 2006, no income statement for the Bank has been presented as a primary financial statement.

Notes on the accounts

9 Trading assets and liabilities

Trading assets and liabilities held at fair value in trading portfolios.

	Group		Bank	
	2018	2017	2018	2017
	£m	£m	£m	£m
Assets				
Loans				
- Reverse repos	24,758	36,271	15,915	27,313
- Cash collateral given	18,898	21,513	18,898	21,513
- Other loans	1,302	642	934	596
Total loans	44,958	58,426	35,747	49,422
Securities				
- Central and local government				
- UK	6,834	3,514	6,834	3,514
- US	4,689	3,667	1,498	277
- Other	13,498	14,736	13,498	14,736
- Other securities	4,993	5,589	4,413	5,062
Total securities	30,014	27,506	26,243	23,589
Total	74,972	85,932	61,990	73,011
Liabilities				
Deposits				
- Repos	25,645	28,362	9,784	12,910
- Cash collateral received	20,129	22,673	20,129	22,667
- Other deposits	1,786	1,291	1,786	1,291
Total deposits	47,560	52,326	31,699	36,868
Debt securities in issue	902	1,107	902	1,107
Short positions	23,827	28,527	21,939	26,207
Total	72,289	81,960	54,540	64,182

Notes on the accounts

10 Derivatives

Companies within the Group transact derivatives as principal either as a trading activity or to manage balance sheet foreign exchange, interest rate and credit risk.

	Group					
	2018			2017		
	Notional amount £bn	Assets £m	Liabilities £m	Notional amount £bn	Assets £m	Liabilities £m
Exchange rate contracts	3,444	36,635	38,346	3,405	39,067	41,511
Interest rate contracts	10,287	97,226	91,327	11,754	119,530	111,134
Credit derivatives	16	346	226	39	530	559
Equity and commodity contracts	1	43	15	3	151	126
		134,250	129,914		159,278	153,330

	Bank					
	2018			2017		
	Notional amount £bn	Assets £m	Liabilities £m	Notional amount £bn	Assets £m	Liabilities £m
Exchange rate contracts	3,444	36,636	38,349	3,411	39,148	41,638
Interest rate contracts	10,267	97,266	91,384	11,914	122,175	112,723
Credit derivatives	16	346	226	39	531	558
Equity and commodity contracts	1	43	15	3	151	179
		134,291	129,974		162,005	155,098

Refer to Note 11 for amounts due to/from fellow RBS Group subsidiaries.

The Group enters into fair value hedges, cash flow hedges and hedges of net investments in foreign operations.

The majority of the Group's interest rate hedges relate to the management of the Group's non-trading interest rate risk. The Group manages this risk within approved limits. Residual risk positions are hedged with derivatives principally interest rate swaps. Suitable larger financial instruments are fair value hedged; the remaining exposure, where possible, is hedged by derivatives documented as cash flow hedges.

The majority of the Group's fair value hedges involve interest rate swaps hedging the fixed interest rate risk in recognised financial assets and financial liabilities.

Cash flow hedges relate to exposures to the variability in future interest payments and receipts due to the movement of benchmark interest rates on forecast transactions and on recognised financial assets and financial liabilities. This variability in cash flows is hedged by interest rate swaps.

For cash flow hedge relationships of interest rate risk, the hedged items are actual and forecast variable interest rate cash flows arising from financial assets with interest rates linked to the relevant benchmark rate LIBOR, EURIBOR or the Bank of England Official Bank Rate. The financial assets are loans to banks and customers. The variability in cash flows due to movements in the relevant benchmark rate is hedged; this risk component is identified using the risk management systems of the Group. This risk component comprises the majority of cash flow variability risk.

For cash flow hedging relationships the Group determines that there is an economic relationship between the hedged item and hedging instrument via assessing the initial and ongoing effectiveness by comparing movements in the fair value of the expected highly probable forecast interest cash flows with movements in the fair value of the expected changes in cash flows from the hedging interest rate swap.

Hedge effectiveness is measured on a cumulative basis over a time period management feels appropriate. The method of calculating hedge ineffectiveness is the hypothetical derivative method. The Group uses the actual ratio between the hedged item and hedging instrument to establish the hedge ratio for hedge accounting.

For fair value hedge relationships of interest rate risk, the hedged items are typically large corporate fixed-rate loans, government securities, fixed rate finance leases, fixed rate medium-term notes or preference shares classified as debt. The hedged risk is the risk of changes in the hedged items fair value attributable to changes in the benchmark interest rate embedded in the hedged item. This risk component is identified using the risk management systems of the Group. This risk component comprises the majority of the hedged items fair value risk.

For fair value hedge relationships the Group determines that there is an economic relationship between the hedged items and hedging instrument via assessing the initial and ongoing effectiveness by comparing movements in the fair value of the hedged item attributable to the hedged risk with movements in the fair value of the expected changes in cash flows from the hedging interest rate swap.

The Group hedges the currency risk of its net investment in foreign currency denominated operations with currency borrowings and forward foreign exchange contracts. NatWest Markets reviews the value of the investments net assets, executing hedges where appropriate to reduce the sensitivity of capital ratios to foreign exchange rate movements.

Notes on the accounts

10 Derivatives continued

Included in the table above are derivatives held for hedging as follows:

	Group			2017	
	2018	Assets	Liabilities	Assets	Liabilities
	Notional £bn	£m	£m	£m	£m
Fair value hedging - interest rate contracts	8.9	79	24	—	10
Cash flow hedging - interest rate contracts	5.8	181	—	—	—
Net investment hedging - exchange rate contracts	0.7	27	9	—	—

	Bank			2017	
	2018	Assets	Liabilities	Assets	Liabilities
	Notional £bn	£m	£m	£m	£m
Fair value hedging - exchange rate contracts	0.6	22	4	—	—
Fair value hedging - interest rate contracts	8.8	79	15	—	10
Cash flow hedging - Interest rate contracts	5.8	181	—	—	—
Net investment hedging - exchange rate contracts	0.1	5	5	—	—

The following table shows the period in which the hedging contract ends:

	Group							Total
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	
Fair value hedging								
Hedging assets - interest rate risk (£bn)	—	—	0.3	0.4	0.2	—	—	0.9
Hedging liabilities - interest rate risk (£bn)	—	—	4.1	3.8	0.1	—	—	8.0
Cash flow hedging								
Hedging assets - interest rate risk (£bn)	—	0.5	1.8	1.5	2.0	—	—	5.8
Average fixed interest rate	—	2.29	2.14	2.13	1.62	—	—	1.97
Net investment hedging								
Exchange rate risk (£bn)	0.4	0.2	0.1	—	—	—	—	0.7
Principal currency hedges								
Average CHF - £ rate	1.22	1.23	1.18	—	—	—	—	1.21

	Bank							Total
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	
Fair value hedging								
Hedging assets - interest rate risk (£bn)	—	—	0.3	0.4	0.2	—	—	0.9
Hedging assets - exchange rate risk (£bn)	0.4	0.1	0.1	—	—	—	—	0.6
Hedging liabilities - interest rate risk (£bn)	—	—	4.1	3.7	0.1	—	—	7.9
Cash flow hedging								
Hedging assets - interest rate risk (£bn)	—	0.5	1.8	1.5	2.0	—	—	5.8
Average fixed interest rate	—	2.29	2.14	2.13	1.82	—	—	1.97
Net investment hedging								
Exchange rate risk (£bn)	—	0.1	—	—	—	—	—	0.1
Principal currency hedges	—	—	—	—	—	—	—	—
Average rupee - £ rate	—	102.70	—	—	—	—	—	102.70

Notes on the accounts

10 Derivatives continued

The tables below analyses assets and liabilities subject to hedging derivatives:

	Group			Bank		
	Carrying value (CV) of hedged assets and liabilities £m	Impact on hedged items included in CV £m	Impact on hedged items ceased to be adjusted for hedging gains or losses £m	Carrying value (CV) of hedged assets and liabilities £m	Impact on hedged items included in CV £m	Impact on hedged items ceased to be adjusted for hedging gains or losses £m
2018						
Fair value hedging – interest rate						
Loans to customers - amortised cost	63	9	31	—	—	—
Other financial assets - securities	888	(14)	—	888	(14)	—
	951	(5)	31	888	(14)	—
Fair value hedging - foreign exchange	—	—	—	502	44	20
Total assets	951	(5)	31	1,390	30	20
Other financial liabilities - debt securities in issue	8,652	78	—	8,652	78	—
Total liabilities	8,652	78	—	8,652	78	—
Cash flow hedge – interest rate						
Loans to banks and customers - amortised cost	5,768			5,768		
Total	5,768			5,768		

Hedge ineffectiveness recognised in other operating income in continuing operations comprised:

	Group	
	2018 £m	2017 £m
Fair value hedging		
Losses on the hedged items attributable to the hedged risk	(15)	(4)
Gains on the hedging instruments	15	4
Fair value hedging ineffectiveness	—	—
Cash flow hedging ineffectiveness	(1)	—
Total	(1)	—

Note:

(1) Hedge ineffectiveness recognised in other operating income in discontinued operations was £88 million debit in 2018 (2017 - £29 million credit).

The main sources of ineffectiveness for interest rate risk hedge accounting relationships are:

- the effect of the counterparty credit risk on the fair value of the interest rate swap, which is not reflected in the fair value of the hedged item attributable to the change in interest rate (fair value hedge);
- differences in the repricing basis between the hedging instrument and hedged cash flows (cash flow hedge); and
- upfront present values on the hedging derivatives where hedge accounting relationships have been designated after the trade date (cash flow hedge and fair value hedge).

Additional information on cash flow hedging and net interest hedging can be found in the Statement of Changes in Equity.

Notes on the accounts

11 Financial instruments - classification

The following tables analyse the Group's financial assets and liabilities in accordance with the categories of financial instruments on an IFRS 9 basis at 31 December 2018 and on an IAS 39 basis at 31 December 2017. Assets and liabilities outside the scope of IFRS 9/IAS 39 are shown within other assets and other liabilities.

	Group					
	MFVTPL (1)	DFV (2)	FVOCI (3)	Amortised cost	Other assets	Total
	£m	£m	£m	£m	£m	£m
Assets						
Cash and balances at central banks	—	—	—	11,188		11,188
Trading assets	74,972	—	—			74,972
Derivatives	134,250					134,250
Settlement balances	—	—	—	2,705		2,705
Loans to banks - amortised cost (4)				626		626
Loans to customers - amortised cost				8,366		8,366
Amounts due from holding company and fellow subsidiaries	1,177	—	—	1,991	230	3,398
Other financial assets	1,134	—	7,436	2,698		11,268
Other assets					1,108	1,108
31 December 2018	211,533	—	7,436	27,574	1,338	247,881

	Held-for-trading	DFV (2)	Available-for-sale	Loans and receivables	Held-to-maturity	Other assets	Total
	£m	£m	£m	£m	£m	£m	£m
Cash and balances at central banks	—	—	—	153	—		153
Trading assets	85,932	—	—		—		85,932
Derivatives	159,278				—		159,278
Settlement balances	—	—	—	2,497	—		2,497
Loans to banks - amortised cost (4)				371			371
Loans to customers - amortised cost				9,638			9,638
Amounts due from company and fellow subsidiaries	173	—	—	43	—	—	216
Other financial assets	—	6	531	2,583	—		3,120
Other assets						465,032	465,032
31 December 2017	245,383	6	531	15,285	—	465,032	726,237

For the notes to this table refer to page 87.

	Group				
	Held-for- trading £m	DFV (2) £m	Amortised cost £m	Other liabilities £m	Total £m
Liabilities					
Bank deposits (5)	—	—	2,749		2,749
Customer deposits (6)	—	—	2,580		2,580
Amounts due to holding company and fellow subsidiaries	419	—	9,485	257	10,161
Settlement balances	—	—	2,914		2,914
Trading liabilities	72,289	—	—		72,289
Derivatives	129,914	—	—		129,914
Other financial liabilities	—	3,049	13,230		16,279
Other liabilities				1,906	1,906
31 December 2018	202,622	3,049	30,958	2,163	238,792
	Held-for- trading £m	DFV (2) £m	Amortised cost £m	Other liabilities £m	Total £m
Bank deposits (5)	—	—	528		528
Customer deposits (6)	—	—	3,257		3,257
Amounts due to holding company and fellow subsidiaries	29	—	57	4	90
Settlement balances	—	—	2,817		2,817
Trading liabilities	81,960	—			81,960
Derivatives	153,330	—			153,330
Other financial liabilities	—	3,299	7,956		11,255
Other liabilities				437,740	437,740
31 December 2017	235,319	3,299	14,615	437,744	690,977

Notes on the accounts

11 Financial instruments - classification continued

The above includes amounts due from/to:

	Group			
	2018		2017	
	Holding company £m	Fellow subsidiaries £m	Holding company £m	Fellow subsidiaries £m
Assets				
Loans to banks - amortised cost	—	1,780	—	28
Loans to customers - amortised cost	144	67	—	—
Derivatives	376	813	—	362
Liabilities				
Bank deposits	—	2,125	—	50
Customer deposits	5,189	209	3	3
Subordinated liabilities	1,962	—	—	—
Derivatives	476	703	—	486

Notes:

- (1) Mandatory fair value through profit or loss.
- (2) Designated as at fair value through profit or loss.
- (3) Fair value through other comprehensive income.
- (4) Includes items in the course of collection from other banks of £27 million (2017 - nil).
- (5) Includes items in the course of transmission to other banks of nil (2017 - £1 million).
- (6) There are no customer accounts designated as at fair value through profit or loss (2017 - nil) with a carrying value higher than the principal amount. No amounts have been recognised in profit or loss for changes in credit risk associated with these liabilities as the changes are immaterial both during the period and cumulatively.

The Group's financial assets and liabilities include:

	Group	
	2018	2017
Reverse repos		
Loans to banks - amortised cost	—	36
Loans to customers - amortised cost	9	2,308
Trading assets	24,758	36,271
Repos		
Bank deposits	424	—
Trading liabilities	25,645	28,362

Amounts included in profit from discontinued operations, net of tax, were £1 million gain (2017 – £14 million loss) in relation to financial assets/liabilities as at fair value through profit or loss; and £51 million gain (2017 - £2 million loss) in relation to disposal or settlement of loans and receivables.

Notes on the accounts

11 Financial instruments - classification continued

The following tables show the bank's financial assets and financial liabilities in accordance with the categories of financial instruments in IFRS 9/IAS 39. Assets and liabilities outside the scope of IFRS 9/IAS 39 are shown within other assets and other liabilities.

	Bank					
	MFVTPL (1) £m	DFV (2) £m	FVOCI (3) £m	Amortised cost £m	Other assets £m	Total £m
Assets						
Cash and balances at central banks	—	—	—	11,095		11,095
Trading assets	61,990	—	—			61,990
Derivatives	134,291					134,291
Settlement balances				1,421		1,421
Loans to banks - amortised cost (4)				454		454
Loans to customers - amortised cost				7,908		7,908
Amounts due from holding company and fellow subsidiaries	2,119	—	—	9,451	230	11,800
Other financial assets	1,127	—	7,170	2,698		10,995
Investment in group undertakings	—	—	—	—	1,151	1,151
Other assets					936	936
31 December 2018	199,527	—	7,170	33,027	2,317	242,041
	Held-for- trading £m	Available- for-sale £m	Loans and receivables £m	Held-to- maturity £m	Other assets £m	Total £m
Cash and balances at central banks	—	—	93	—		93
Trading assets	73,011	—		—		73,011
Derivatives	162,005			—		162,005
Settlement balances	—	—	1,614	—		1,614
Loans to banks - amortised cost (4)			195			195
Loans to customers - amortised cost			9,133			9,133
Amounts due from holding company and fellow subsidiaries	2,717	—	3,747	—	6	6,470
Other financial assets	—	496	2,583	—		3,079
Investment in group undertakings	—	—	—	—	496	496
Other assets					269,793	269,793
31 December 2017	237,733	496	17,365	—	270,295	525,889
	Held-for- trading £m	DFV (2) £m		Amortised cost £m	Other liabilities £m	Total £m
Liabilities						
Bank deposits (5)				2,777		2,777
Customer deposits (6)				2,390		2,390
Amounts due to holding company and fellow subsidiaries		7,501	—	15,720	284	23,505
Settlement balances		—	—	1,977		1,977
Trading liabilities		54,540	—			54,540
Derivatives		129,974				129,974
Other financial liabilities		—	3,049	13,230		16,279
Other liabilities				51	1,626	1,677
31 December 2018	192,015	3,049	36,145	1,910	233,119	
Bank deposits (5)				527		527
Customer deposits (6)				3,063		3,063
Amounts due to holding company and fellow subsidiaries		10,806	—	4,176	12	14,994
Settlement balances		—	—	1,372		1,372
Trading liabilities		64,182	—			64,182
Derivatives		155,098	—			155,098
Other financial liabilities		—	3,299	7,956		11,255
Other liabilities					230,876	230,876
31 December 2017	230,086	3,299	17,094	230,888	481,367	

For the notes to this table refer to page 89.

Notes on the accounts

11 Financial instruments - classification continued

The above includes amounts due from/to:

	Bank					
	2018			2017		
	Holding company £m	Fellow subsidiaries £m	Subsidiaries £m	Holding company £m	Fellow subsidiaries £m	Subsidiaries £m
Assets						
Loans to banks - amortised cost	—	2,118	627	—	201	1,525
Loans to customers - amortised cost	144	—	6,562	—	—	1,279
Derivatives	376	812	42	—	362	3,325
Liabilities						
Bank deposits	—	1,976	926	—	79	1,916
Customer deposits	5,157	962	4,444	3	3	2,136
Subordinated liabilities	1,962	—	—	—	—	—
Derivatives	476	646	116	—	486	1,980

Notes:

- (1) Mandatory fair value through profit or loss.
- (2) Designated as at fair value through profit or loss.
- (3) Fair value through other comprehensive income.
- (4) Includes items in the course of collection from other banks of £27 million (2017 - nil).
- (5) Includes items in the course of transmission to other banks of nil (2017 - £1 million).
- (6) There are no customer accounts designated as at fair value through profit or loss (2017 - nil) with a carrying value higher than the principal amount. No amounts have been recognised in profit or loss for changes in credit risk associated with these liabilities as the changes are immaterial both during the period and cumulatively.

The tables below present information on financial assets and liabilities that are offset on the balance sheet under IFRS or subject to enforceable master netting agreements together with financial collateral received or given.

The Bank's financial assets and liabilities include:

	Bank	
	2018 £m	2017 £m
Reverse repos		
Loans to banks - amortised cost	-	36
Loans to customers - amortised cost	9	2,308
Trading assets	15,915	27,313
Repos		
Bank deposits	424	-
Customer deposits	-	-
Trading liabilities	9,784	12,910

Notes on the accounts

11 Financial instruments - classification continued

The tables below present information on financial assets and liabilities that are offset on the balance sheet under IFRS or subject to enforceable master netting agreements together with financial collateral received or given.

	Group									
	Instruments which can be offset			Potential to offset not recognised by IFRS				Instruments outside netting arrangements		
	Gross £m	IFRS offset £m	Balance sheet £m	Effect of master netting and similar agreements £m	Cash collateral £m	Other financial collateral £m	Net amount after the effect of netting arrangements and related collateral £m	£m	Balance sheet total £m	
2018										
Derivative assets	134,081	(2,072)	132,009	(106,762)	(17,930)	(4,469)	2,848	2,241	134,250	
Derivative liabilities	130,342	(2,438)	127,904	(106,762)	(15,224)	(3,466)	2,452	2,010	129,914	
Net position (1)	3,739	366	4,105	—	(2,706)	(1,003)	396	231	4,336	
Trading reverse repos	53,148	(31,376)	21,772	(762)	—	(21,000)	10	2,986	24,758	
Trading repos	55,864	(31,376)	24,488	(762)	—	(23,726)	—	1,157	25,645	
Net position	(2,716)	—	(2,716)	—	—	2,726	10	1,829	(887)	
2017										
Derivative assets	173,058	(15,573)	157,485	(128,018)	(20,297)	(5,836)	3,334	1,793	159,278	
Derivative liabilities	167,862	(16,042)	151,820	(128,018)	(18,028)	(3,952)	1,822	1,510	153,330	
Net position (1)	5,196	469	5,665	—	(2,269)	(1,884)	1,512	283	5,948	
Trading reverse repos	65,540	(32,639)	32,901	(329)	—	(32,530)	42	3,370	36,271	
Trading repos	58,694	(32,639)	26,055	(329)	—	(25,726)	—	2,307	28,362	
Net position	6,846	—	6,846	—	—	(6,804)	42	1,063	7,909	

Note:

(1) The net IFRS offset balance of £366 million (2017 - £469 million) relates to variation margin netting reflected on other balance sheet lines.

	Bank									
	Instruments which can be offset			Potential to offset not recognised by IFRS				Instruments outside netting arrangements		
	Gross £m	IFRS offset £m	Balance sheet £m	Effect of master netting and similar agreements £m	Cash collateral £m	Other financial collateral £m	Net amount after the effect of netting arrangements and related collateral £m	£m	Balance sheet total £m	
2018										
Derivative assets	135,903	(2,072)	133,831	(106,762)	(17,930)	(4,469)	4,670	460	134,291	
Derivative liabilities	131,940	(2,438)	129,502	(106,762)	(15,224)	(3,466)	4,050	472	129,974	
Net position (1)	3,963	366	4,329	—	(2,706)	(1,003)	620	(12)	4,317	
Trading reverse repos	30,895	(17,967)	12,928	(523)	—	(12,405)	—	2,987	15,915	
Trading repos	26,593	(17,967)	8,626	(523)	—	(8,103)	—	1,158	9,784	
Net position	4,302	—	4,302	—	—	(4,302)	—	1,829	6,131	
2017										
Derivative assets	177,576	(15,573)	162,003	(129,800)	(20,289)	(5,692)	6,222	2	162,005	
Derivative liabilities	171,059	(16,042)	155,017	(129,800)	(18,028)	(3,952)	3,237	81	155,098	
Net position (1)	6,517	469	6,986	—	(2,261)	(1,740)	2,985	(79)	6,907	
Trading reverse repos	37,682	(13,740)	23,942	(96)	—	(23,846)	—	3,371	27,313	
Trading repos	24,345	(13,740)	10,605	(96)	—	(10,509)	—	2,305	12,910	
Net position	13,337	—	13,337	—	—	(13,337)	—	1,066	14,403	

Note:

(1) The net IFRS offset balance of £366 million (2017 - £469 million) relates to variation margin netting reflected on other balance sheet lines.

Notes on the accounts

12 Financial instruments - valuation

Critical accounting policy: Fair value - financial instruments

In accordance with Accounting policies 13 and 20, financial instruments at fair value through profit or loss and financial assets classified as fair value through other comprehensive income are recognised in the financial statements at fair value. All derivatives are measured at fair value.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A fair value measurement takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. It also uses the assumptions that market participants would use when pricing the asset or liability. In determining fair value the Group maximises the use of relevant observable inputs and minimises the use of unobservable inputs.

Modelled approaches may be used to measure instruments classed as Level 2 or 3. Estimation expertise is required in the selection, implementation and calibration of appropriate models. The resulting modelled valuations are considered for accuracy and reliability. Portfolio level adjustments consistent with IFRS 13 are raised to incorporate counterparty credit risk, funding and margining risks. Expert judgement is used in the initial measurement of modelled products by control teams.

Where the Group manages a group of financial assets and financial liabilities on the basis of its net exposure to either market risks or credit risk, it measures the fair value of a group of financial assets and financial liabilities on the basis of the price that it would receive to sell a net long position (i.e. an asset) for a particular risk exposure or to transfer a net short position (i.e. a liability) for a particular risk exposure in an orderly transaction at the measurement date under current market conditions.

Credit valuation adjustments are made when valuing derivative financial assets to incorporate counterparty credit risk. Adjustments are also made when valuing financial liabilities measured at fair value to reflect the Group's own credit standing.

Where the market for a financial instrument is not active, fair value is established using a valuation technique. These valuation techniques involve a degree of estimation, the extent of which depends on the instrument's complexity and the availability of market-based data. Further details about the valuation methodologies and the sensitivity to reasonably possible alternative assumptions of the fair value of financial instruments valued using techniques where at least one significant input is unobservable are given below.

	2018			2017		
	Level 1 £m	Level 2 £m	Level 3 £m	Level 1 £m	Level 2 £m	Level 3 £m
Assets						
Trading assets						
Loans	—	44,838	120	—	58,321	105
Securities	22,003	7,312	699	19,783	6,874	849
Derivatives	—	132,346	1,904	10	157,548	1,720
Amounts due from holding company and fellow subsidiaries	—	1,177	—	—	173	—
Other financial assets						
Loans	—	374	86	—	—	—
Securities	6,706	959	445	167	309	61
Total financial assets held at fair value	28,709	187,006	3,254	19,960	223,225	2,735
Liabilities						
Amounts due to holding company and fellow subsidiaries	—	413	6	—	17	12
Trading liabilities						
Deposits	—	47,183	377	—	52,089	237
Debt securities in issue	—	790	112	—	1,057	50
Short positions	18,941	4,886	—	23,715	4,796	16
Derivatives	—	128,638	1,276	2	151,842	1,486
Other financial liabilities						
Debt securities in issue	—	2,344	280	—	3,037	262
Subordinated liabilities	—	425	—	—	—	—
Total financial liabilities held at fair value	18,941	184,679	2,051	23,717	212,838	2,063

Notes:

- (1) Transfers between levels are deemed to have occurred at the beginning of the quarter in which the instruments were transferred.
- (2) For an analysis of debt securities, by issuer and measurement classification, and derivatives, by type and contract, refer to Capital and Risk management – Credit risk.
- (3) The determination of an instrument's level cannot be made at a global product level as a single product type can be in more than one level. For example, a single name corporate credit default swap could be in level 2 or level 3 depending on whether the reference counterparty's obligations are liquid or illiquid.

Notes on the accounts

12 Financial instruments – valuation continued

Valuation of financial instruments carried at fair value

Fair Value Hierarchy

Financial Instruments carried at fair value have been classified under the IFRS fair value hierarchy as follows.

Level 1 – Instruments valued using unadjusted quoted prices in active and liquid markets, for identical financial instruments. Examples include government bonds, listed equity shares and certain exchange-traded derivatives.

Level 2 – instruments valued using valuation techniques that have observable inputs. Examples include most government agency securities, investment-grade corporate bonds, certain mortgage products, including CLOs, most bank loans, repos and reverse repos, less liquid listed equities, state and municipal obligations, most notes issued, and certain money market securities and loan commitments and most OTC derivatives.

Level 3 – instruments valued using a valuation technique where at least one input which could have a significant effect on the instrument's valuation, is not based on observable market data. Examples include cash instruments which trade infrequently, certain syndicated and commercial mortgage loans, certain emerging markets and derivatives with unobservable model inputs.

Valuation Techniques

NatWest Markets derives the fair value of its instruments differently depending on whether the instrument is a non-modelled or a modelled product.

Non-modelled products are valued directly from a price input typically on a position by position basis. Examples include equities and most debt securities.

Products that are priced using models range in complexity from comparatively vanilla such as interest rate swaps and options (e.g. interest rate caps and floors) through to more complex derivatives. The valuation of modelled products requires an appropriate model and inputs into this model.

Inputs to valuation models

Values between and beyond available data points are obtained by interpolation and extrapolation. When utilising valuation techniques, the fair value can be significantly affected by the choice of valuation model and by underlying assumptions concerning factors such as the amounts and timing of cash flows, discount rates and credit risk. The principal inputs to these valuation techniques are as follows:

Bond prices – quoted prices are generally available for government bonds, certain corporate securities and some mortgage-related products.

Credit spreads – where available, these are derived from prices of credit default swaps or other credit based instruments, such as debt securities. For others, credit spreads are obtained from 3rd party benchmarking services. For counterparty credit spreads, adjustments are made to market prices (or parameters) when the creditworthiness of the counterparty differs from that of the assumed counterparty in the market price (or parameters).

Interest rates – these are principally benchmark interest rates such as the London Interbank Offered Rate (LIBOR), Overnight Index Swaps (OIS) rate and other quoted interest rates in the swap, bond and futures markets.

Foreign currency exchange rates – there generally are observable prices both for spot and forward contracts and futures in the world's major currencies.

Equity and equity index prices – quoted prices are generally readily available for equity shares listed on the world's major stock exchanges and for major indices on such shares.

Commodity prices – many commodities are actively traded in spot and forward contracts and futures on exchanges in London, New York and other commercial centres.

Price volatilities and correlations – volatility is a measure of the tendency of a price to change with time. Correlation measures the degree to which two or more prices or other variables are observed to move together.

Prepayment rates – the fair value of a financial instrument that can be prepaid by the issuer or borrower differs from that of an instrument that cannot be prepaid. In valuing pre-payable instruments that are not quoted in active markets, NatWest Markets considers the value of the prepayment option.

Recovery rates/loss given default – these are used as an input to valuation models and reserves for asset-backed securities and other credit products as an indicator of severity of losses on default. Recovery rates are primarily sourced from market data providers or inferred from observable credit spreads.

Valuation Control

NatWest Markets' control environment for the determination of the fair value of financial instruments includes formalised protocols for the review and validation of fair values independent of the businesses entering into the transactions.

Independent Price Verification (IPV) is a key element of the control environment. Valuations are first performed by the business which owns the transaction. Such valuations may be directly from available prices, or may be derived using a model and variable model inputs. These valuations are reviewed, and if necessary amended, by a team independent of those trading the financial instruments, in the light of available pricing evidence.

Where measurement differences are identified through the IPV process these are grouped by fair value level and quality of data. If the size of the difference exceeds defined thresholds adjustment to independent levels are made.

IPV takes place at least each month, for all fair value positions. The IPV control includes formalised reporting and escalation of any valuation differences in breach of established thresholds.

The Modelled Product Review Committee sets the policy for model documentation, testing and review, and prioritises models with significant exposure being reviewed by the Model Risk team. The NatWest Markets Valuation Committees is made up of valuation specialists and senior business representatives from various functions and oversees pricing, reserving and valuations issues. The committee meets monthly to review and ratify any methodology changes. The Executive Valuation Committee meets quarterly to address key material and subjective valuation issues, to review items escalated by Valuation Committees and to discuss other relevant matters including prudential valuation.

Initial classification of a financial instrument is carried out by the Product Control team following the principles in IFRS 13. They base their judgment on information gathered during the IPV process for instruments which include the sourcing of independent prices and model inputs. The quality and completeness of the information gathered in the IPV process gives an indication as to the liquidity and valuation uncertainty of an instrument.

Notes on the accounts

12 Financial instruments - Valuation continued

These initial classifications are subject to senior management review. Particular attention is paid to instruments crossing from one level to another, new instrument classes or products, instruments that are generating significant profit and loss and instruments where valuation uncertainty is high.

NatWest Markets uses consensus prices for the IPV of some instruments. The consensus service encompasses the equity, interest rate, currency, commodity, credit, property, fund and bond markets, providing comprehensive matrices of vanilla prices and a wide selection of exotic products. NatWest Markets contributes to consensus pricing services where there is a significant interest either from a positional point of view or to test models for future business use. Data sourced from consensus pricing services are used for a combination of control processes including direct price testing, evidence of observability and model testing. In practice this means that NatWest Markets submits prices for all material positions for which a service is available. Data from consensus services are subject to the same level of quality review as other inputs used for IPV process.

In order to determine a reliable fair value, where appropriate, management applies valuation adjustments to the pricing information gathered from the above sources. The sources of independent data are reviewed for quality and are applied in the IPV processes using a formalised input quality hierarchy. These adjustments reflect NatWest Markets' assessment of factors that market participants would consider in setting a price.

Where unobservable inputs are used, NatWest Markets may determine a range of possible valuations derived from differing stress scenarios to determine the sensitivity associated with the valuation. When establishing the fair value of a financial instrument using a valuation technique, NatWest Markets considers adjustments to the modelled price which market participants would make when pricing that instrument. Such adjustments include the credit quality of the counterparty and adjustments to compensate for model limitations.

When valuing financial instruments in the trading book, adjustments are made to mid-market valuations to cover bid-offer spread, liquidity and credit risk. These adjustments are presented in the table below.

	2018 £m	2017 £m
Funding – FVA	250	438
Credit – CVA	326	342
Bid – Offer	238	286
Product and deal specific	324	843
	1,138	1,909

The reduction in valuation reserves was primarily driven by a combination of trade close-out activity and a reallocation of product and deal specific reserves that are now included within the discount rate applied to the derivative cash-flows. The reduction in CVA reserves in this regard was offset by the extension of this reserve to include margin period of risk on collateralised counterparties.

Funding valuation adjustment (FVA)

FVA represents an estimate of the adjustment that a market participant would make to incorporate funding costs and benefits that arise in relation to derivative exposures. FVA is calculated as a portfolio level adjustment.

Funding levels are applied to estimated potential future exposures. For uncollateralised derivatives, the modelling of the exposure is consistent with the approach used in the calculation of CVA, and the counterparty contingent nature of the exposure is reflected in the calculation. For collateralised derivatives, the exposure reflects initial margin posting requirements.

Credit valuation adjustments (CVA)

CVA represents an estimate of the adjustment to fair value that a market participant would make to incorporate the counterparty credit

risk inherent in derivative exposures. CVA is actively managed by a credit and market risk hedging process, and therefore movements in CVA are partially offset by trading revenue on the hedges.

The CVA is calculated on a portfolio basis reflecting an estimate of the amount a third party would charge to assume the credit risk.

Collateral held under a credit support agreement is factored into the CVA calculation. In such cases where NatWest Markets holds collateral against counterparty exposures, CVA is held to the extent that residual risk remains.

Bid-offer

Fair value positions are adjusted to bid (long positions) or offer (short positions) levels, by marking individual cash positions directly to bid or offer or by taking bid-offer reserves calculated on a portfolio basis for derivatives exposures. The bid-offer approach is based on current market spreads and standard market bucketing of risk.

Bid-offer spreads vary by maturity and risk type to reflect different spreads in the market. For positions where there is no observable quote, the bid-offer spreads are widened in comparison to proxies to reflect reduced liquidity or observability. Bid-offer methodologies may also incorporate liquidity triggers whereby wider spreads are applied to risks above pre-defined thresholds.

As permitted by IFRS 13, netting is applied on a portfolio basis to reflect the value at which NatWest Markets believes it could exit the portfolio, rather than the sum of exit costs for each of the portfolio's individual trades. This is applied where the asset and liability positions are managed as a portfolio for risk and reporting purposes.

The discount rates applied to derivative cash flows in determining fair value reflect any underlying collateral agreements. Collateralised derivatives are generally discounted at the relevant OIS-related rates at an individual trade level. Reserves are held to the extent that the discount rates applied do not reflect all of the terms of the collateral agreements.

Product and deal specific

On initial recognition of financial assets and liabilities valued using valuation techniques incorporating information other than observable market data, any difference between the transaction price and that derived from the valuation technique is deferred. Such amounts are recognised in profit or loss over the life of the transaction; when market data becomes observable; or when the transaction matures or is closed out as appropriate. At 31 December 2018, net gains of £59 million (2017 - £55 million) were carried forward. During the year, net gains of £151 million (2017 - £64 million) were deferred and £148 million (2017 - £80 million) were recognised in the income statement.

Where system generated valuations do not accurately recover market prices, manual valuation adjustments are applied either at a position or portfolio level. Manual adjustments are subject to the scrutiny of independent control teams and are subject to monthly review by senior management.

Own Credit

The Group takes into account the effect of its own credit standing when valuing financial liabilities recorded at fair value in accordance with IFRS. Own credit spread adjustments are made when valuing issued debt held at fair value, including issued structured notes, and derivatives. An own credit adjustment is applied to positions where it is believed that counterparties would consider the Group's creditworthiness when pricing trades.

Notes on the accounts

12 Financial instruments – valuation: Level 3 ranges of unobservable inputs

Financial instrument	Valuation Technique	Unobservable inputs	Units	2018		2017			
				Low	High	Low	High		
Trading assets and Other financial assets									
Loans	Price-based	Price	%	0	132	0	101		
Debt securities	Price-based	Price	GBP	0	154	0	370		
Equity Shares	Price-based	Price	GBP	0	24,181	0	585,066		
	Valuation	Discount factor	%	8	11	9	13		
	Valuation	Fund NAV	%	80	120	80	120		
Trading liabilities and Other financial liabilities									
Customer accounts	DCF based on recoveries	Correlation	%	(45)	99	(29)	86		
		Interest rate	%	(0.36)	1.74	(0.38)	2.61		
Debt securities in issue	Price-based	Price	CCY	21 JPY	136 EUR	56 JPY	149 EUR		
	Valuation	Fund NAV	GBP	0	622	0	977		
Derivative assets and liabilities									
Credit derivatives	DCF based on recoveries	Credit spreads	bps	18	500	0	500		
		Option pricing	Correlation	%	(50)	80	(50)	80	
			Volatility	%	47	80	38	80	
			Upfront points	%	0	100	0	99	
	Price-based		Recovery rate	%	10	40	10	40	
			Price	%	90	110			
		Option pricing		Correlation	%	(45)	99	(75)	100
				Volatility	%	1	76	0	292
Interest rate & FX derivatives	Option pricing								
Equity derivatives	Option pricing	Correlation	%	(57)	92	(57)	95		
		Forward	Points	864	7,106	146	189		
		Volatility	%	11	23	7	11		

Notes:

- (1) The table above presents the range of values for significant inputs used in the valuation of level 3 assets and liabilities. The range represents the highest and lowest values of the input parameters and therefore is not a measure of parameter uncertainty. Movements in the underlying input may have a favourable or unfavourable impact on the valuation depending on the particular terms of the contract and the exposure. For example, an increase in the credit spread of a bond would be favourable for the issuer but unfavourable for the note holder. Whilst RBS indicates where it considers that there are significant relationships between the inputs, their inter-relationships will be affected by macro economic factors including interest rates, foreign exchange rates or equity index levels.
- (2) Credit spreads and discount margins: credit spreads and margins express the return required over a benchmark rate or index to compensate for the credit risk associated with a cash instrument. A higher credit spread would indicate that the underlying instrument has more credit risk associated with it. Consequently, investors require a higher yield to compensate for the higher risk.
- (3) Price and yield: There may be a range of prices used to value an instrument that may be a direct comparison of one instrument or portfolio with another or, movements in a more liquid instrument may be used to indicate the movement in the value of a less liquid instrument. The comparison may also be indirect in that adjustments are made to the price to reflect differences between the pricing source and the instrument being valued.
- (4) Recovery rate: reflects market expectations about the return of principal for a debt instrument or other obligations after a credit event or on liquidation. Recovery rates tend to move conversely to credit spreads.
- (5) Valuation: for private equity investments, values may be estimated by looking at past prices of similar stocks and from valuation statements where valuations are usually derived from earnings measures such as EBITDA or net asset value (NAV). Similarly for equity or bond fund investments, prices may be estimated from valuation or credit statements using NAV or similar measures.
- (6) Correlation: measures the degree by which two prices or other variables are observed to move together. If they move in the same direction there is positive correlation; if they move in opposite directions there is negative correlation. Correlations typically include relationships between: default probabilities of assets in a basket (a group of separate assets), exchange rates, interest rates and other financial variables.
- (7) Volatility: a measure of the tendency of a price to change with time.
- (8) Interest rate delta: these ranges represent the low/high marks on the relevant discounting curve.
- (9) Upfront points: where CDS contracts are standardised, the inherent spread of the trade may exceed the standard premium paid or received under the contract. Upfront points will compensate for the difference between the standard premium and the actual premium at the start of the contract.
- (10) The Group does not have any material liabilities measured at fair value that are issued with an inseparable third party credit enhancement.

Areas of judgement

Whilst the business has simplified, the diverse range of products historically traded by the Group results in a wide range of instruments that are classified into Level 3 of the hierarchy. Whilst the majority of these instruments naturally fall into a particular level, for some products an element of judgment is required. The majority of the Group's financial instruments carried at fair value are classified as Level 2. IFRS requires extra disclosures in respect of level 3 instruments.

Active and inactive markets

A key input in the decision making process for the allocation of assets to a particular level is market activity. In general, the degree of valuation uncertainty depends on the degree of liquidity of an input. Where markets are liquid, little judgment is required. However, when the information regarding the liquidity in a particular market is not clear, a judgment may need to be made. This can be more difficult as assessing the liquidity of a market is not always straightforward. For an equity traded on an exchange, daily volumes of trading can be seen, but for an over-the-counter (OTC) derivative assessing the liquidity of the market with no central exchange is more difficult.

A key related matter is where a market moves from liquid to illiquid or vice versa. Where this change is considered to be temporary, the classification is not changed. For example, if there is little market trading in a product on a reporting date but at the previous reporting date and during the intervening period the market has been considered to be liquid, the instrument will continue to be classified in the same level in the hierarchy. This is to provide consistency so that transfers between levels are driven by genuine changes in market liquidity and do not reflect short term or seasonal effects. Material movements between levels are reviewed quarterly. The breadth and depth of the IPV data allows for a rules based quality assessment to be made of market activity, liquidity and pricing uncertainty, which assists with the process of allocation to an appropriate level. Where suitable independent pricing information is not readily available, the quality assessment will result in the instrument being assessed as Level 3.

Notes on the accounts

12 Financial instruments: valuation – areas of judgement

continued

Modelled products

For modelled products the market convention is to quote these trades through the model inputs or parameters as opposed to a cash price equivalent. A mark-to-market is derived from the use of the independent market inputs calculated using the Group's model.

The decision to classify a modelled instrument as Level 2 or 3 will be dependent upon the product/model combination, the currency, the maturity, the observability and quality of input parameters and other factors. All these must be assessed to classify the asset.

If an input fails the observability or quality tests then the instrument is considered to be in Level 3 unless the input can be shown to have an insignificant effect on the overall valuation of the product.

The majority of derivative instruments for example vanilla interest rate swaps, foreign exchange swaps and liquid single name credit derivatives are classified as Level 2 as they are vanilla products valued using observable inputs. The valuation uncertainty on these is considered to be low and both input and output testing may be available.

Non-modelled products

Non-modelled products are generally quoted on a price basis and can therefore be considered for each of the three levels. This is determined by the market activity, liquidity and valuation uncertainty

of the instruments which is in turn measured from the availability of independent data used by the IPV process to allocate positions to IPV quality levels.

The availability and quality of independent pricing information are considered during the classification process. An assessment is made regarding the quality of the independent information. For example, where consensus prices are used for non-modelled products, a key assessment of the quality of a price is the depth of the number of prices used to provide the consensus price. If the depth of contributors falls below a set hurdle rate, the instrument is considered to be Level 3. This hurdle rate is that used in the IPV process to determine the IPV quality rating. However, where an instrument is generally considered to be illiquid, but regular quotes from market participants exist, these instruments may be classified as Level 2 depending on frequency of quotes, other available pricing and whether the quotes are used as part of the IPV process or not.

For some instruments with a wide number of available price sources, there may be differing quality of available information and there may be a wide range of prices from different sources. In these situations the highest quality source is used to determine the classification of the asset. For example, a tradable quote would be considered a better source than a consensus price.

	2018			2017		
	Level 3 £m	Favourable £m	Unfavourable £m	Level 3 £m	Favourable £m	Unfavourable £m
Assets						
Trading assets						
Loans	120	10	(10)	105	—	—
Securities	699	20	(10)	849	30	(10)
Derivatives						
Interest rate	1,363	110	(110)	1,328	140	(140)
Foreign exchange	130	10	(10)	143	10	(10)
Other	411	40	(40)	249	10	(10)
Other financial assets						
Loans	86	—	(10)	—	—	—
Securities	445	40	(20)	61	—	—
	3,254	230	(210)	2,735	190	(170)
Liabilities						
Amounts due to holding companies and fellow subsidiaries	6	—	—	12	—	—
Trading liabilities						
Deposits	377	40	(40)	237	20	(20)
Debt securities in issue	112	10	(10)	50	—	—
Short positions	—	—	—	16	—	—
Derivatives						
Interest rate	805	70	(70)	973	70	(70)
Foreign exchange	279	10	(10)	358	10	(10)
Other	192	10	(10)	155	10	(10)
Other financial liabilities						
Debt securities in issue	280	10	(10)	262	10	(10)
	2,051	150	(150)	2,063	120	(120)

Reasonably plausible alternative assumptions of unobservable inputs are determined based on specified target level of certainty of 90%. The assessments recognise different favourable and unfavourable valuation movements where appropriate. Each unobservable input within a product is considered separately and sensitivity is reported on an additive basis.

Alternative assumptions are determined with reference to all available evidence including consideration of the following: quality of independent pricing information taking into account consistency between different sources, variation over time, perceived tradability or otherwise of available quotes; consensus service dispersion ranges; volume of trading activity and market bias (e.g. one-way inventory); day 1 profit or loss arising on new trades; number and nature of

market participants; market conditions; modelling consistency in the market; size and nature of risk; length of holding of position; and market intelligence.

Other considerations

Whilst certain inputs used to calculate CVA, FVA and own credit adjustments are not based on observable market data, the uncertainty of the inputs is not considered to have a significant effect on the net valuation of the related derivative portfolios and issued debt. The classification of the derivative portfolios and issued debt is not determined by the observability of these inputs, and any related sensitivity does not form part of the Level 3 sensitivities presented.

Notes on the accounts

12 Financial instruments: valuation continued

Level 3

The following table shows the movement in level 3 assets and liabilities in the year.

	2018				2017			
	Trading assets (3) £m	Other financial assets (4) £m	Total assets £m	Total liabilities £m	Trading assets (3) £m	Other financial assets (4) £m	Total assets £m	Total liabilities £m
At 1 January (1)	2,681	282	2,963	2,096	3,922	470	4,392	2,943
Amounts recorded in the income statement (2)	(104)	154	50	(244)	(579)	19	(560)	(405)
Amounts recorded in the statement of comprehensive income	—	(2)	(2)	—	—	6	6	—
Level 3 transfers in	1,219	19	1,238	476	628	315	943	504
Level 3 transfers out	(624)	(1)	(625)	(235)	(1,016)	(3)	(1,019)	(607)
Transfer from/(to) to disposal groups	41	173	214	43	(6)	(522)	(528)	(32)
Issuances	—	—	—	47	371	—	371	—
Purchases	880	4	884	404	1,788	18	1,806	412
Settlements	(455)	—	(455)	(208)	(161)	—	(161)	(434)
Sales	(915)	(102)	(1,017)	(328)	(2,256)	(240)	(2,496)	(323)
Foreign exchange and other adjustments	—	4	4	—	(17)	(2)	(19)	5
At 31 December (1)	2,723	531	3,254	2,051	2,674	61	2,735	2,063
Amounts recorded in the income statement in respect of balances held at year end								
- unrealised	(142)	203	61	(235)	(24)	4	(20)	598
- realised	(2)	3	1	—	271	5	276	(100)

Notes:

- (1) Refer to Note 33 for further information on the impact of IFRS 9 on classification and basis of preparation, year ended 31 December 2018 prepared under IFRS 9 and prior years under IAS 39.
- (2) Net losses on trading assets and liabilities of £128 million (2017 - £159 million) were recorded in income from trading activities in continuing operations. Net losses on other instruments of £166 million (2017 - £45 million) were recorded in other operating income and interest income as appropriate in continuing operations. Net losses on trading assets and liabilities of nil (2017 - £2 million losses) were recorded in discontinued operations. Net gains on other instruments of nil (2017 - £51 million) were recorded in discontinued operations.
- (3) Trading assets comprise assets held at fair value in trading portfolios.
- (4) Other financial assets comprise fair value through other comprehensive income (2017 – available-for-sale), designated as at fair value through profit or loss and mandatory fair value through profit or loss.

The following table shows the carrying value and fair value of financial instruments carried at amortised cost on the balance sheet:

	Group					Bank				
	Items where fair value approximates carrying value £bn	Carrying value £bn	Fair value £bn	Fair value hierarchy level		Items where fair value approximates carrying value £bn	Carrying value £bn	Fair value £bn	Fair value hierarchy level	
				Level 2 £bn	Level 3 £bn				Level 2 £bn	Level 3 £bn
2018										
Financial assets										
Cash and balances at central banks	11.2					11.1				
Settlement balances	2.7					1.4				
Loans to banks		0.6	0.6	0.3	0.3		0.5	0.4	0.2	0.2
Loans to customers		8.4	8.3	0.3	8.0		7.9	7.9	—	7.9
Amounts due from holding company and fellow subsidiaries	0.3	1.7	1.6	—	1.6	0.9	8.6	8.5	—	8.5
Other financial assets										
Securities		2.7	2.7	1.6	1.1		2.7	2.7	1.6	1.1
Financial liabilities										
Bank deposits		2.7	2.7	—	2.7		2.8	2.7	—	2.7
Customer deposits	0.9	1.7	1.7	—	1.7	0.7	1.7	1.7	—	1.7
Amounts due to holding company and fellow subsidiaries	3.9	5.6	5.6	—	5.6	4.5	11.2	11.2	—	11.2
Settlement balances	2.9					2.0				
Other financial liabilities										
Debt securities in issue		13.0	14.7	14.7	—		13.0	14.7	14.7	—
Subordinated liabilities		0.2	0.2	0.2	—		0.2	0.2	0.2	—

Notes on the accounts

12 Financial instruments: fair value of financial instruments not carried at fair value continued

	Group					Bank				
	Items where fair value approximates carrying value £bn	Carrying value £bn	Fair value £bn	Fair value hierarchy level		Items where fair value approximates carrying value £bn	Carrying value £bn	Fair value £bn	Fair value hierarchy level	
				Level 2 £bn	Level 3 £bn				Level 2 £bn	Level 3 £bn
2017										
Financial assets										
Cash and balances at central banks	0.2					0.1				
Settlement balances	2.5					1.6				
Loans to banks		0.4	0.4	0.2	0.2		0.2	0.2	—	0.2
Loans to customers		9.6	9.6	1.2	8.4		9.1	9.1	0.7	8.4
Amounts due from holding companies and fellow subsidiaries		—	—	—	—		3.7	3.9	—	3.9
Other financial assets										
Securities		2.6	2.6	1.5	1.1		2.6	2.6	1.5	1.1
Financial liabilities										
Bank deposits		0.5	0.4	—	0.4	0.1	0.4	0.4	—	0.4
Customer deposits	1.0	2.3	2.2	—	2.2	0.8	2.3	2.2	—	2.2
Amounts due to holding companies and fellow subsidiaries	0.1	—	—	—	—		4.1	4.4	—	4.4
Settlement balances	2.8					1.4				
Other financial liabilities										
Debt securities in issue		8.0	8.3	5.9	2.4		8.0	8.3	5.9	2.4

The fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Quoted market values are used where available; otherwise, fair values have been estimated based on discounted expected future cash flows and other valuation techniques. These techniques involve uncertainties and require assumptions and judgments covering prepayments, credit risk and discount rates. Furthermore there is a wide range of potential valuation techniques. Changes in these assumptions would significantly affect estimated fair values. The fair values reported would not necessarily be realised in an immediate sale or settlement.

The assumptions and methodologies underlying the calculation of fair values of financial instruments at the balance sheet date are as follows:

Short-term financial instruments

For certain short-term financial instruments: cash and balances at central banks, items in the course of collection from other banks, settlement balances, items in the course of transmission to other banks, customer demand deposits and notes in circulation, carrying value is a reasonable approximation of fair value.

Loans to banks and customers

In estimating the fair value of net loans to customers and banks measured at amortised cost, the Group's loans are segregated into appropriate portfolios reflecting the characteristics of the constituent loans. Two principal methods are used to estimate fair value:

- Contractual cash flows are discounted using a market discount rate that incorporates the current spread for the borrower or where this is not observable, the spread for borrowers of a similar credit standing. This method is used for institutional and corporate lending portfolios in NatWest Markets Plc, where counterparties have external ratings.
- Expected cash flows (unadjusted for credit losses) are discounted at the current offer rate for the same or similar products. This approach is adopted for lending portfolios in UK PBB, Ulster Bank RoI, Commercial Banking (SME loans) and Private Banking in order to reflect the homogeneous nature of these portfolios which are included in assets of disposal groups.

For certain portfolios where there are very few or no recent transactions, a bespoke approach is used.

Debt securities

The majority of debt securities are valued using quoted prices in active markets, or using quoted prices for similar assets in active markets. Fair values of the rest are determined using discounted cash flow valuation techniques.

Deposits by banks and customer accounts

Fair values of deposits are estimated using discounted cash flow valuation techniques.

Banks and customer deposits

Fair values are determined using quoted prices for similar liabilities where available or by reference to valuation techniques, adjusting for own credit spreads where appropriate.

Notes on the accounts

13 Financial instruments - maturity analysis

Remaining maturity

The following table shows the residual maturity of financial instruments, based on contractual date of maturity:

	Group					
	2018			2017		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	11,188	—	11,188	153	—	153
Trading assets	48,982	25,990	74,972	66,291	19,641	85,932
Derivatives	28,606	105,644	134,250	32,247	127,031	159,278
Settlement balances	2,705	—	2,705	2,497	—	2,497
Loans to banks - amortised cost	588	38	626	345	26	371
Loans to customers - amortised cost	4,540	3,826	8,366	6,174	3,464	9,638
Amounts due from holding company and fellow subsidiaries (1)	2,980	188	3,168	207	9	216
Other financial assets	4,316	6,952	11,268	768	2,352	3,120
Liabilities						
Bank deposits	2,749	—	2,749	526	2	528
Customer deposits	2,549	31	2,580	3,169	88	3,257
Amounts due to holding company and fellow subsidiaries (2)	2,727	7,177	9,904	83	3	86
Settlement balances	2,914	—	2,914	2,817	—	2,817
Trading liabilities	50,608	21,681	72,289	53,764	28,196	81,960
Derivatives	29,250	100,664	129,914	32,163	121,167	153,330
Other financial liabilities	6,368	9,911	16,279	4,397	6,858	11,255

	Bank					
	2018			2017		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	11,095	—	11,095	93	—	93
Trading assets	39,873	22,117	61,990	56,685	16,326	73,011
Derivatives	28,607	105,684	134,291	32,322	129,683	162,005
Settlement balances	1,421	—	1,421	1,614	—	1,614
Loans to banks - amortised cost	416	38	454	169	26	195
Loans to customers - amortised cost	4,233	3,675	7,908	5,708	3,425	9,133
Amounts due from holding company and fellow subsidiaries (1)	8,027	3,543	11,570	3,095	3,369	6,464
Other financial assets	4,298	6,697	10,995	763	2,316	3,079
Liabilities						
Bank deposits	2,777	—	2,777	526	1	527
Customer deposits	2,361	29	2,390	2,977	86	3,063
Amounts due to holding company and fellow subsidiaries (2)	13,426	9,795	23,221	10,608	4,374	14,982
Settlement balances	1,977	—	1,977	1,372	—	1,372
Trading liabilities	34,508	20,032	54,540	38,018	26,164	64,182
Derivatives	29,198	100,776	129,974	32,336	122,762	155,098
Other financial liabilities	6,368	9,911	16,279	4,397	6,858	11,255

Notes:

- (1) Amounts due from holding company and fellow subsidiaries relating to non-financial instruments of £230 million (2017 – nil) for Group and £230 million (2017 – £6 million) for the Bank have been excluded from the tables.
- (2) Amounts due to holding company and fellow subsidiaries relating to non-financial instruments of £257 million (2017 – £4 million) for Group and £284 million (2017 – £12 million) for the Bank have been excluded from the tables.

Notes on the accounts

13 Financial instruments - maturity analysis continued

On balance sheet liabilities

The tables below show the timing of cash outflows to settle financial liabilities, prepared on the following basis:

Financial liabilities are included at the earliest date on which the counterparty can require repayment regardless of whether or not such early repayment results in a penalty. If repayment is triggered by, or is subject to, specific criteria such as market price hurdles being reached, the liability is included at the earliest possible date that the conditions could be fulfilled without considering the probability of the conditions being met. For example, if a structured note automatically prepays when an equity index exceeds a certain level, the cash outflow will be included in the less than three months' period whatever the level of the index at the year end. The settlement date of debt securities issued by certain securitisation vehicles consolidated by the Group depends on when cash flows are received from the securitised assets. Where these assets are prepayable, the timing of the cash outflow relating to securities assumes that each asset will be prepaid at the earliest possible date.

Liabilities with a contractual maturity of greater than 20 years - The principal amounts of financial liabilities that are repayable after 20 years or where the counterparty has no right to repayment of the principal, are excluded from the table along with interest payments after 20 years.

Held-for-trading liabilities - Held-for-trading liabilities of £203 billion (2017- £235 billion) for the Group and £192 billion (2017 - £230 billion) for the bank, have been excluded from the tables.

	Group					
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years
	£m	£m	£m	£m	£m	£m
2018						
Liabilities by contractual maturity						
Bank deposits	2,728	21	—	—	—	—
Customer deposits	1,659	891	25	4	2	2
Amounts due to holding company and fellow subsidiaries	2,094	211	41	5,453	920	59
Settlement balances	2,914	—	—	—	—	—
Derivatives held for hedging	—	10	26	6	(2)	1
Other financial liabilities	1,302	5,066	6,494	2,359	837	200
Other liabilities (1)	45	—	—	—	—	—
	10,742	6,199	6,586	7,822	1,757	262
Guarantees and commitments notional amount						
Guarantees (2,3)	278	—	—	—	—	—
Commitments (4)	8,927	—	—	—	—	—
	9,205	—	—	—	—	—
2017						
Liabilities by contractual maturity						
Bank deposits	517	11	—	—	—	—
Customer deposits	2,954	201	95	7	2	2
Amounts due to holding company and fellow subsidiaries	51	3	3	—	—	—
Settlement balances	2,817	—	—	—	—	—
Derivatives held for hedging	—	1	2	1	3	3
Other financial liabilities	1,871	2,526	904	307	5,647	—
	8,210	2,742	1,004	315	5,652	5
Guarantees and commitments notional amount						
Guarantees (2,3)	523	—	—	—	—	—
Commitments (4)	9,732	—	—	—	—	—
	10,255	—	—	—	—	—

For notes to the above table refer to the following page.

Notes on the accounts

13 Financial instruments - maturity analysis continued

2018	Bank					
	0-3 months £m	3-12 months £m	1-3 years £m	3-5 years £m	5-10 years £m	10-20 years £m
Liabilities by contractual maturity						
Bank deposits	2,756	21	—	—	—	—
Customer deposits	1,469	891	25	4	2	2
Amounts due to holding company and fellow subsidiaries	3,286	2,788	571	6,538	1,801	59
Settlement balances	1,977	—	—	—	—	—
Derivatives held for hedging	—	10	23	4	(5)	—
Other financial liabilities	1,302	5,066	6,494	2,359	837	200
Other liabilities (1)	45	—	—	—	—	—
	10,835	8,776	7,113	8,905	2,635	261
Guarantees and commitments notional amount						
Guarantees (2,3)	278	—	—	—	—	—
Commitments (4)	8,922	—	—	—	—	—
	9,200	—	—	—	—	—
2017						
Liabilities by contractual maturity						
Bank deposits	516	11	—	—	—	—
Customer deposits	2,764	202	94	6	1	—
Amounts due to holding company and fellow subsidiaries	458	118	1,429	1,014	924	233
Settlement balances	1,372	—	—	—	—	—
Derivatives held for hedging	—	1	2	1	3	3
Other financial liabilities	1,871	2,526	904	307	5,647	—
	6,981	2,858	2,429	1,328	6,575	236
Guarantees and commitments notional amount						
Guarantees (2,3)	523	—	—	—	—	—
Commitments (4)	9,725	—	—	—	—	—
	10,248	—	—	—	—	—

Notes:

- (1) Other liabilities includes notes in circulation.
- (2) The Group is only called upon to satisfy a guarantee when the guaranteed party fails to meet its obligations. The Group expects most guarantees it provides to expire unused.
- (3) Guarantees exclude the Asset Protection Scheme related financial guarantee contract of £nil million (2017 - £142 million) between the bank and a fellow subsidiary.
- (4) The Group has given commitments to provide funds to customers under undrawn formal facilities, credit lines and other commitments to lend subject to certain conditions being met by the counterparty. The Group does not expect all facilities to be drawn, and some may lapse before drawdown.

Notes on the accounts

14 Loan impairment provisions

Loan exposure and impairment metrics

The table below summarises loans and related credit impairment measures on an IFRS 9 basis at 31 December 2018 and 1 January 2018.

	31 December 2018 £m	1 January 2018 £m
Loans - amortised cost		
- Stage 1	8,088	8,535
- Stage 2	365	775
- Stage 3	671	342
- Inter-Group	2,634	28
	11,758	9,680
ECL provisions (1)		
- Stage 1	6	2
- Stage 2	8	33
- Stage 3	62	108
	76	143
ECL provision coverage (2)		
- Stage 1 %	0.07	0.02
- Stage 2 %	2.19	4.26
- Stage 3 %	9.24	31.58
	0.83	1.48
ECL charge (3)		
- Third party	(107)	
- Inter-Group	5	
	(102)	
Impairment losses		
- ECL loss rate - annualised (basis points)	(117)	
- Amounts written off	69	

Notes:

- (1) ECL provisions in the above table are provisions on loan assets only. Other ECL provisions, not included above, relate to cash at Central banks, debt securities and contingent liabilities, and amount to £10 million, of which FVOCI is £2 million.
- (2) ECL provisions coverage is ECL provisions divided by loans - amortised cost.
- (3) ECL charge balances in the above table include £3 million charge relating to other financial assets, of which £1 million charge relates to assets at FVOCI; and £3 million release relating to contingent liabilities.
- (4) ECL provisions on inter-Group loans were £0.2 million at 31 December 2018, which gave a provision coverage of 0.02%.
- (5) The above table relates to loans only. Other financial assets within the scope of the IFRS 9 ECL framework at 31 December 2018 were cash at central banks of £11.2 billion and debt securities of £9.8 billion.

Notes on the accounts

14 Loan impairment provisions continued

Credit risk enhancement and mitigation

For information on credit risk enhancement and mitigation held as security, refer to capital and risk management – credit risk on page 34.

Critical accounting policy: Loan impairment provisions

The Group's 2017 loan impairment provisions were established in accordance with IAS 39 in respect of incurred losses. They comprised individual and collective components as more fully explained in the 2017 Annual Report and Accounts. In 2018 the loan impairment provisions have been established in accordance with IFRS 9.

Accounting policy 14 sets out how the expected loss approach is applied. At 31 December 2018, customer loan impairment provisions amounted to £76 million (2017 - £123 million). A loan is impaired when there is objective evidence that the cash flows will not occur in the manner expected when the loan was advanced. Such evidence includes changes in the credit rating of a borrower, the failure to make payments in accordance with the loan agreement; significant reduction in the value of any security; breach of limits or covenants; and observable data about relevant macroeconomic measures.

The impairment loss is the difference between the carrying value of the loan and the present value of estimated future cash flows at the loan's original effective interest rate.

The measurement of credit impairment under the IFRS expected loss model depends on management's assessment of any potential deterioration in the creditworthiness of the borrower, its modelling of expected performance and the application of economic forecasts. All three elements require judgments that are potentially significant to the estimate of impairment losses. Further information and sensitivity analyses are on page 28.

IFRS 9 ECL model design principles

To meet IFRS 9 requirements for ECL estimation, PD, LGD and EAD used in the calculations must be:

- Unbiased - material regulatory conservatism has been removed to produce unbiased model estimates;
- Point-in-time - recognise current economic conditions;
- Forward-looking - incorporated into PD estimates and, where appropriate, EAD and LGD estimates; and
- For the life of the loan - all models produce a term structure to allow a lifetime calculation for assets in Stage 2 and Stage 3.

IFRS 9 requires that at each reporting date, an entity shall assess whether the credit risk on an account has increased significantly since initial recognition. Part of this assessment requires a comparison to be made between the current lifetime PD (i.e. the current probability of default over the remaining lifetime) with the equivalent lifetime PD as determined at the date of initial recognition.

The general approach for the IFRS 9 LGD models has been to leverage the Basel LGD models with bespoke IFRS 9 adjustments to ensure unbiased estimates, i.e. use of effective interest rate as the discount rate and the removal of: downturn calibration, indirect costs, other conservatism and regulatory floors.

For Wholesale, while conversion ratios in the historical data show temporal variations, these cannot (unlike in the case of PD and some LGD models) be sufficiently explained by the CCI measure and are presumed to be driven to a larger extent by exposure management practices. Therefore point-in-time best estimates measures for EAD are derived by estimating the regulatory model specification on a rolling five year window.

Approach for multiple economic scenarios (MES)

The base scenario plays a greater part in the calculation of ECL than the approach to MES.

15 Other financial assets

	Group						
	Debt securities				Equity shares £m	Loans £m	Total £m
	Central and local government US £m	Other £m	Other debt £m	Total £m			
2018							
Mandatory fair value through profit or loss	—	—	668	668	6	460	1,134
Fair value through other comprehensive income	2,930	4,078	139	7,147	289	—	7,436
Amortised cost	—	—	2,698	2,698	—	—	2,698
Total	2,930	4,078	3,505	10,513	295	460	11,268
2017							
Designated as at fair value through profit or loss	—	—	—	—	6	—	6
Available-for-sale	160	309	6	475	56	—	531
Loans and receivables	—	—	2,583	2,583	—	—	2,583
Total	160	309	2,589	3,058	62	—	3,120

	Bank						
	Debt securities				Equity shares £m	Loans £m	Total £m
	Central and local government US £m	Other £m	Other debt £m	Total £m			
2018							
Mandatory fair value through profit or loss	—	—	667	667	—	460	1,127
Fair value through other comprehensive income	2,930	4,054	—	6,984	186	—	7,170
Amortised cost	—	—	2,698	2,698	—	—	2,698
Total	2,930	4,054	3,365	10,349	186	460	10,995
2017							
Available-for-sale	160	308	2	470	26	—	496
Loans and receivables	—	—	2,583	2,583	—	—	2,583
Total	160	308	2,585	3,053	26	—	3,079

Equity shares classified as fair value through other comprehensive income include the following entities and 2018 dividend received; VISA Inc. £98 million (dividend of £1 million), Tradeweb Markets LLC £89 million (dividend of £4 million), Big Society Capital Limited £42 million (dividend nil) and OTC DERIV Limited £15 million (dividend of £3 million).

Notes on the accounts

16 Investments in Group undertakings

Investments in Group undertakings are carried at cost less impairment. Movements during the year were as follows:

	Bank	
	2018 £m	2017 £m
At 1 January	496	35,169
Currency translation and other adjustments	27	7
Additional investments in Group undertakings	—	32,648
Additions	920	—
Disposals	(100)	(33,253)
(Impairment)/write-back of investments	(192)	(1,073)
Transfer to disposal groups	—	(33,002)
At 31 December	1,151	496

The principal subsidiary undertaking of the Bank is NWM Securities Inc. (formerly RBS Securities Inc., renamed in 2018); its capital consists of ordinary shares, which are unlisted and owned indirectly through an intermediate holding company. NWM Securities Inc. is included in the Group's consolidated financial statements and has an accounting reference date of 31 December.

Disposals and impairments

On 1 January 2017, the Bank exchanged its shareholdings in National Westminster Bank Plc (NatWest) and former Adam & Company Group PLC (renamed Royal Bank of Scotland plc in 2018) for additional shares in its wholly-owned subsidiary NatWest Holdings Limited.

On 29 June 2018 the Court of Session in Scotland approved a capital reduction which was completed on 2 July 2018 which effected, primarily through a distribution in specie, the transfer of NatWest Holdings to RBSG thereby creating the legal separation of those RBS Group entities that are within the ring-fenced sub-group from those held outside the ring-fence. This holding was presented within disposal groups at 31 December 2017, refer to Note 21 for further information.

The impairment charge in 2018 mainly relates to the company's investment in RBS Netherlands Holdings B.V. The impairment charge in 2017 mainly relates to a return of capital from the Bank's investment in RBSG International Holdings Limited (RBSIH).

A number of subsidiaries were transferred from RBS Group companies in preparation for ring-fencing. Their activities are limited and will be closed as soon as practicable.

Full information on all related undertakings is included in Note 37.

17 Other assets

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Prepayments	11	12	8	6
Accrued income	71	17	68	12
Tax recoverable	441	262	455	262
Pension schemes in net surplus (Note 5)	299	290	299	290
Interests in associates	5	2	1	1
Property, plant and equipment	32	159	1	5
Other assets	130	246	104	14
Assets of disposal groups (Note 21)	119	463,878	—	269,038
Deferred tax (Note 7)	—	166	—	165
	1,108	465,032	936	269,793

18 Other financial liabilities

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Debt securities in issue				
- designated at fair value through profit or loss	2,624	3,299	2,624	3,299
- amortised cost	12,997	7,956	12,997	7,956
Subordinated liabilities				
- designated at fair value through profit or loss	425	—	425	—
- amortised cost	233	—	233	—
Total	16,279	11,255	16,279	11,255

Notes on the accounts

19 Subordinated liabilities

At 31 December 2017 liabilities of disposal group included subordinated liabilities (including inter-group) of £9,753 million for Group and £8,364 million for Bank, which were due to be redeemed as part of liability management in preparation for ring-fencing. The tables below detail these redemptions, and the balances at 31 December 2018 represent a number of issuances transferred back to continuing operations during the year.

	Group		Bank	
	2018	2017	2018	2017
	£m	£m	£m	£m
Dated loan capital	524	—	524	—
Undated loan capital	134	—	134	—
	658	—	658	—

Note:

- (1) Excludes amounts due to holding company and fellow subsidiaries of £1,962 million (2017 – nil) for the Group and £1,962 million (2017 - nil) for the Bank which are analysed in the tables below.

The following tables analyse third party subordinated liabilities:

	Capital treatment	2018 £m	2017 £m
Dated loan capital			
US\$125.6 million floating rate notes 2020 ⁽³⁾	Tier 2	99	—
€300 million floating rate notes 2022 ⁽³⁾	Tier 2	266	—
€144.4 million floating rate notes 2023 ⁽³⁾	Tier 2	159	—
		524	—

Notes:

- (1) In the event of certain changes in tax laws, dates and loan capital issues may be redeemed in whole, but not in part, at the option of the issuer, at the principal amount thereof plus accrued interest, subject to prior regulatory approval
- (2) Except as stated above, claims in respect of the Group's dated loan capital are subordinated to the claims of other creditors. None of the Group's dated loan capital is secured.
- (3) Interest on all floating rate subordinated notes is calculated by reference to market rates.

	Capital treatment	2018 £m	2017 £m
Undated loan capital			
£31 million 4.956% notes (not callable)	Ineligible	31	—
£35 million 5.50% notes (callable December 2019)	Ineligible	36	—
£21 million 6.20% notes (callable March 2022)	Ineligible	25	—
£16 million 5.625% (callable September 2026)	Ineligible	22	—
£19 million 5.625% notes (callable June 2032)	Ineligible	20	—
		134	—

Notes:

- (1) The company can satisfy interest payment obligations by issuing ordinary shares to appointed Trustees to enable them, on selling these shares, to settle the interest payment.
- (2) Except as stated above, claims in respect of the Group's undated loan capital are subordinated to the claims of other creditors. None of the Group's undated loan capital is secured.
- (3) In the event of certain changes in tax laws, undated loan capital issues may be redeemed in whole, but not in part, at the option of the Group, at the principal amount thereof plus accrued interest, subject to prior regulatory approval.

	Capital treatment	2018 £m	2017 £m
Third party redemptions in the period (values as at date of transaction)			
€2,000 million 6.934% subordinated notes 2018	Tier 2	1,743	—
£130 million 9.5% undated subordinated bonds (callable August 2018)	Ineligible	103	—
		1,846	—

Notes on the accounts

19 Subordinated liabilities *continued*

The following tables analyse intercompany subordinated liabilities:

	Capital treatment	2018 £m	2017 £m
Dated loan capital			
€1,000 million 3.625% notes 2024	Tier 2	951	—
US\$389 million 6.10% notes 2023	Tier 2	307	—
		1,258	—
Undated loan capital			
<i>The Royal Bank of Scotland Group plc</i>			
US\$600 million floating rate perpetual notes (callable June 2018)	Tier 2	469	—
Preference shares			
US\$300 million 7.25% Series H (callable anytime)	Ineligible	235	—
Redemptions in the period (values as at date of transaction)			
<i>The Royal Bank of Scotland Group plc</i>			
£100 million floating rate perpetual notes (callable December 2012)	Tier 2	100	—
£420 million floating rate perpetual notes (callable July 2013)	Tier 2	420	—
US\$650 million 6.425% Series N (callable January 2034)	Ineligible	481	—
US\$750 million 6.80% Series L (callable anytime)	Ineligible	555	—
US\$850 million 5.75% Series R (callable quarterly)	Ineligible	629	—
US\$2,000 million 6.00% notes 2023	Tier 2	1,480	—
		3,665	—

20 Other liabilities

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Current tax	26	140	26	30
Accruals	228	471	137	336
Deferred income	44	35	45	34
Deferred tax (Note 7)	487	128	446	100
Other liabilities	110	101	258	67
Retirement benefit liabilities (Note 5)	115	54	114	52
Provisions for liabilities and charges	895	3,979	651	2,230
Liabilities of disposal groups (Note 21)	1	432,832	—	228,027
	1,906	437,740	1,677	230,876

Notes on the accounts

20 Other liabilities continued

	Group			
	DoJ (1) £m	Litigation and other regulatory (inc. RMBS) £m	Other (2) £m	Total £m
Provisions for liabilities and charges				
At 1 January 2018 (3)	3,243	412	324	3,979
Implementation of IFRS 9 on 1 January 2018 (4)	—	—	17	17
ECL impairment charge	—	—	(11)	(11)
Disposals	—	—	(1)	(1)
RMBS Transfers	(683)	683	—	—
Currency translation and other movements	161	79	(71)	169
Transfers to/from fellow subsidiaries	—	27	9	36
Charge to income statement	1,040	141	92	1,273
Releases to income statement	—	(309)	(69)	(378)
Provisions utilised	(3,761)	(335)	(93)	(4,189)
At 31 December 2018	—	698	197	895

	Other customer Redress £m	DoJ (1) £m	Bank Litigation and other regulatory (inc. RMBS) £m	Other (2) £m	Total £m
Provisions for liabilities and charges					
At 1 January 2018 ⁽³⁾	15	1,560	400	255	2,230
Implementation of IFRS 9 on 1 January 2018 ⁽⁴⁾	—	—	—	17	17
ECL impairment charge	—	—	—	(5)	(5)
Currency translation and other movements	—	65	—	4	69
Transfers to/from fellow subsidiaries	8	—	—	—	8
Charge to income statement	-	274	148	193	615
Releases to income statement	(5)	(101)	(48)	(100)	(254)
Provisions utilised	(2)	(1,798)	(55)	(174)	(2,029)
At 31 December 2018	16	-	445	190	651

Notes:

- (1) The RMBS provision has been redesignated DoJ and the remaining RMBS litigation matters transferred to Litigation and other regulatory as of 1 January 2018 to reflect progress on resolution.
- (2) Materially comprises provisions relating to property closures and restructuring costs.
- (3) Excludes provisions within liabilities of disposal groups. Group provisions for liabilities and charges in disposal groups were £3,576 million, Bank were £2,045 million.
- (4) Refer to Note 33 for further details on the impact of IFRS 9 on classification and basis of preparation.

Critical accounting policy: Provisions for liabilities

Judgment is involved in determining whether an obligation exists, and in estimating the probability, timing and amount of any outflows. Where the Group can look to another party such as an insurer to pay some or all of the expenditure required to settle a provision, any reimbursement is recognised when, and only when, it is virtually certain that it will be received.

Estimates - Provisions are liabilities of uncertain timing or amount, and are recognised when there is a present obligation as a result of a past event, the outflow of economic benefit is probable and the outflow can be estimated reliably. Any difference between the final outcome and the amounts provided will affect the reported results in the period when the matter is resolved.

Notes on the accounts

21 Discontinued operations

As part of implementing the legislation following the recommendations of the Independent Commission on Banking, the transfer of the Group's Personal & Business Banking (PBB), Commercial & Private Banking (CPB) and certain parts of Central items and NatWest Markets included in the ring-fenced bank, to subsidiaries of NatWest Holdings, took place in Q2 2018. It was followed by a transfer of NatWest Holdings to RBSG. Accordingly, all of the activities to be undertaken by NatWest Holdings and its subsidiaries were classified as disposal groups at 31 December 2017 and presented as discontinued operations, with comparatives re-presented.

	Group	
	2018	2017
	£m	£m
NatWest Holdings (1)		
Interest income	5,657	10,528
Interest expense	(1,322)	(2,131)
Net interest income	4,335	8,397
Other income	2,131	1,953
Total income	6,466	10,350
Operating expenses	(3,436)	(7,729)
Profit before impairment losses	3,030	2,621
Impairment losses	(137)	(608)
Operating profit before tax	2,893	2,013
Tax charge	(432)	(821)
Profit from discontinued operations net of tax	2,461	1,192

Note:

- (1) Other comprehensive loss from discontinued operations for the year ended 31 December 2018 was £3,556 million, including £2 billion in respect of pension contributions (2017 – loss £270 million).
- (2) At 31 December 2018 the following items previously classified within discontinuing operations continued to be owned by the Group and had been reclassified out of disposal groups: Loans to customers of circa £1.0 billion; other assets of £0.2 billion; and Subordinated liabilities of £0.7 billion.

Cash flows attributable to discontinued operations

Included within the Group's cash flows are the following amounts attributable to discontinued operations.

	2018	2017
	£m	£m
Net cash flows from operating activities	8,942	30,520
Net cash flows from investing activities	(3,657)	(4,745)
Net cash flows from financing activities	1,636	(10,046)
Net increase in cash and cash equivalents	7,295	16,550

Cash flows from financing activities include £1,200 million capital contribution made in accordance with the Memorandum of Understanding signed on 17 April 2018.

22 Share capital and reserves

	2018	2017	Number of shares	
	£m	£m	2018	2017
			000s	000s
Allotted, called up and fully paid				
Ordinary shares of £1	400	6,609	399,517	6,608,517
Non-cumulative preference shares of US\$0.01	-	-	12,000	56,000

	£m	Number of shares - 000s
Movement in allotted, called up and fully paid ordinary shares		
At 1 January 2017 and 2018	6,609	6,608,517
Capital reduction	(6,209)	(6,209,000)
At 31 December 2018	400	399,517

Ordinary shares

On 29 June 2018 the Court of Session in Scotland approved a capital reduction including the cancellation of the share premium account and capital redemption reserve (together the "capital reduction") in relation to the Bank. The capital reduction was completed on 2 July 2018 which effected, primarily through a distribution in specie, the transfer of NatWest Holdings to RBSG thereby creating the legal separation of those RBS Group entities that are within the ring-fenced sub-group from those held outside the ring-fence.

As a result of the capital reduction the issued ordinary share capital reduced 6,209 million to 400 million £1 shares, the Bank's share premium account and capital redemption reserve were also cancelled.

The Bank paid an ordinary dividend to RBSG in 2018 of £2,550 million, £6.38 per share (2017 – nil).

Reserves

The Group optimises capital efficiency by maintaining reserves in subsidiaries, including regulated entities. Certain preference shares and subordinated debt are also included within regulatory capital. The remittance of reserves to the parent or the redemption of shares or subordinated capital by regulated entities may be subject to maintaining the capital resources required by the relevant regulator.

Notes on the accounts

23 Leases

Minimum amounts receivable under non-cancellable leases:

Year in which receipt will occur	Finance lease contracts and hire purchase agreements (1)				Operating lease assets: future minimum lease rentals
	Gross amounts £m	Present value adjustments £m	Other movements £m	Present value £m	£m
2018					
Within 1 year	117	(2)	(40)	75	12
After 1 year but within 5 years	120	(23)	—	97	55
After 5 years	40	(27)	—	13	33
Total	277	(52)	(40)	185	100
2017					
Within 1 year	10	—	—	10	—
After 1 year but within 5 years	61	(3)	—	58	—
After 5 years	—	—	—	—	—
Total	71	(3)	—	68	—

Note:

(1) The residual value on hire purchase agreements of £40 million (2017 – nil) is expected to be recovered within one year. No residual value is expected for finance lease contracts (2017 – nil).

	Group	
	2018 £m	2017 £m
Nature of operating lease assets on the balance sheet		
Cars and light commercial vehicles	—	1
Amounts recognised as income and expense		
Operating leases - minimum rentals payable	12	6

24 Structured entities

A structured entity (SE) is an entity that has been designed such that voting or similar rights are not the dominant factor in deciding who controls the entity, for example, when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. SEs are usually established for a specific, limited purpose, they do not carry out a business or trade and typically have no employees. They take a variety of legal forms - trusts, partnerships and companies - and fulfil many different functions. As well as being a key element of securitisations, SEs are also used in fund management activities to segregate custodial duties from the fund management advice.

Consolidated structured entities

Securitisations

In a securitisation, assets, or interests in a pool of assets, are transferred generally to a SE which then issues liabilities to third party investors. The majority of securitisations are supported through liquidity facilities or other credit enhancements. The Group arranges securitisations to facilitate client transactions and

undertakes own asset securitisations to sell or to fund portfolios of financial assets. The Group also acts as an underwriter and depositor in securitisation transactions in both client and proprietary transactions. The Group's involvement in client securitisations takes a number of forms. It may: sponsor or administer a securitisation programme; provide liquidity facilities or programme-wide credit enhancement; and purchase securities issued by the vehicle.

Covered debt programme

The Bank has assigned certain loans to customers and other debt instruments to bankruptcy remote limited liability partnerships to provide security for issues of debt securities by the Bank. The Bank retains all of the risks and rewards of these assets and continues to recognise them. The partnerships are consolidated by the Group and the related covered debt included within other financial liabilities. At 31 December 2018, £2,838 (2017 - £76 million) of loans and other debt instruments provided security for £1,260 million (2017 – nil) debt securities in issue and other borrowing by the Bank and the Group.

Notes on the accounts

24 Structured entities continued Unconsolidated structured entities

The Group's interests in unconsolidated structured entities are analysed below.

	2018			2017		
	Asset backed securitisation vehicles £m	Investment funds and other £m	Total £m	Asset backed securitisation vehicles £m	Investment funds and other £m	Total £m
Trading assets and derivatives						
Trading assets	582	164	746	875	127	1,002
Derivative assets	236	325	561	660	117	777
Derivative liabilities	(220)	(332)	(552)	(559)	(131)	(690)
Total	598	157	755	976	113	1,089
Non trading assets						
Loans to customers	1,597	220	1,817	1,043	71	1,114
Other financial assets	2,631	—	2,631	2,255	141	2,396
Total	4,228	220	4,448	3,298	212	3,510
Liquidity facilities/loan commitments	2,136	113	2,249	2,115	399	2,514
Guarantees	3	10	13	229	5	234
Maximum exposure	6,965	500	7,465	6,618	729	7,347

25 Asset transfers

Transfers that do not qualify for derecognition

The Bank enters into securities financing, reverse repurchase and total return agreements in accordance with normal market practice which includes the provision of additional collateral if necessary. Under standard terms in the UK and US markets, the recipient has an unrestricted right to sell or repledge collateral, subject to returning equivalent securities on maturity of the transaction.

Securities sold under repurchase transactions and transactions with the substance of securities repurchase agreements are not derecognised if the Group retains substantially all the risks and rewards of ownership. The fair value (and carrying value) of securities transferred under such transactions included on the balance sheet, are set out below. All of these securities could be sold or repledged by the holder

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
The following assets have failed derecognition (1)				
Trading assets	14,020	7,938	12,621	7,938

Note:

(1) Associated liabilities were £13,351 million for the Group (2017 - £7,483 million) and £11,958 million for the Bank (2017 - £7,483 million).

Assets pledged as collateral

The Group pledges collateral with its counterparties in respect of derivative liabilities and bank and other borrowings

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Assets pledged against liabilities				
Trading assets	31,098	36,586	31,098	34,584
Loans to customers - amortised cost	2,378	—	2,378	—
Other financial assets	123	102	97	102
	33,599	36,688	33,573	34,686
Liabilities secured by assets				
Bank deposits	1,596	—	1,596	—
Derivatives	21,157	22,912	21,157	22,912
	22,753	22,912	22,753	22,912

The following table analyses assets that have been transferred but have failed the derecognition rules under IFRS 9 and therefore continue to be recognised on the Bank's balance sheet

Asset type	2018 £m	2017 £m
Loans and other debt instruments - covered debt programme (1)	2,838	76

Note:

(1) The associated liabilities were £2,728 million (2017 - £66 million).

Notes on the accounts

26 Capital resources

Under Capital Requirements Regulation (CRR), regulators within the European Union monitor capital on a legal entity basis, with local transitional arrangements on the phasing in of end-point CRR. The capital resources based on the PRA transitional basis for the Bank are set out below.

	2018 £m	2017 £m
Shareholders' equity		
Shareholders' equity	8,922	44,522
Other Equity Instruments	(749)	—
	8,173	44,522
Regulatory adjustments and deductions		
Own credit	(223)	10
Defined benefit pension fund adjustment	(197)	(196)
Cash flow hedging reserve	(114)	49
Deferred tax assets	—	(50)
Prudential valuation adjustments	(450)	(471)
Expected losses less impairments	(351)	(579)
Instruments of financial sector entities where the institution has a significant and non-significant investment	(445)	(22,539)
Other regulatory adjustments	(24)	(577)
	(1,804)	(24,353)
CET1 capital	6,369	20,169
Additional Tier 1 (AT1) capital		
Qualifying instruments and related share premium	749	—
Qualifying instruments and related share premium subject to phase out	234	1,877
	983	1,877
Tier 1 deductions		
Instruments of financial sector entities where the institution has a significant investment	—	(80)
	—	(80)
Tier 1 capital	7,352	21,966
Qualifying Tier 2 capital		
Qualifying instruments and related share premium	2,098	4,353
Tier 2 deductions		
Instruments of financial sector entities where the institution has a significant and non-significant investment	(693)	(719)
	(693)	(719)
Tier 2 capital	1,405	3,634
Total regulatory capital	8,757	25,600

In the management of capital resources, the Bank is governed by the RBS Group's policy to maintain a strong capital base, to expand it as appropriate and to utilise it efficiently throughout its activities to optimise the return to shareholders while maintaining a prudent relationship between the capital base and the underlying risks of the business. In carrying out this policy, the RBS Group has regard to the supervisory requirements of the PRA. The PRA uses capital ratios as a measure of capital adequacy in the UK banking sector, comparing a bank's capital resources with its risk-weighted assets (the assets and off-balance sheet exposures are 'weighted' to reflect the inherent credit and other risks); by international agreement, the Pillar 1 capital ratios, excluding capital buffers, should be not less than 8% with a Common Equity Tier 1 component of not less than 4.5%. The Bank has complied with the PRA's capital requirements throughout the year.

A number of subsidiaries and sub-groups within the Group, principally banking entities, are subject to various individual regulatory capital requirements in the UK and overseas. Furthermore, the payment of dividends by subsidiaries and the ability of members of the RBS Group to lend money to other members of the RBS Group may be subject to restrictions such as local regulatory or legal requirements, the availability of reserves and financial and operating performance.

Key movements during 2018

On 2 July 2018 the company reduced its equity capital base by returning the entire issued share capital (6,209 million ordinary shares of £1 each) of NatWest Holdings Limited, the intermediate holding company of the ring-fenced subsidiaries, to RBSG. Its debt funding has been reorganised to be commensurate with its activities as an investment bank. Notwithstanding these capital changes the company is targeting a strong capital base with a CET1 of 15% and a total capital ratio of around 30% (including MREL) by 2020.

Notes on the accounts

27 Memorandum items

Contingent liabilities and commitments

The amounts shown in the table below are intended only to provide an indication of the volume of business outstanding at 31 December 2018. Although the Group is exposed to credit risk in the event of non-performance of the obligations undertaken by customers, the amounts shown do not, and are not intended to, provide any indication of the Group's expectation of future losses.

	Group		Bank	
	2018	2017	2018	2017
	£m	£m	£m	£m
Contingent liabilities and commitments				
Guarantees and assets pledged as collateral security	278	523	278	523
Other contingent liabilities	186	534	186	533
Standby facilities, credit lines and other commitments	10,659	11,765	10,654	11,757
	11,123	12,822	11,118	12,813

Note:

(1) In the normal course of business, the Bank guarantees specified third party liabilities of certain subsidiaries; it also gives undertakings that individual subsidiaries will fulfil their obligations to third parties under contractual or other arrangements.

Banking commitments and contingent obligations, which have been entered into on behalf of customers and for which there are corresponding obligations from customers, are not included in assets and liabilities. The Group's maximum exposure to credit loss, in the event of its obligation crystallising and all counterclaims, collateral or security proving valueless, is represented by the contractual nominal amount of these instruments included in the table above. These commitments and contingent obligations are subject to the Group's normal credit approval processes.

Guarantees - the Group gives guarantees on behalf of customers. A financial guarantee represents an irrevocable undertaking that the Group will meet a customer's specified obligations to a third party if the customer fails to do so. The maximum amount that the Group could be required to pay under a guarantee is its principal amount as in the table above. The Group expects most guarantees it provides to expire unused.

Other contingent liabilities - these include standby letters of credit, supporting customer debt issues and contingent liabilities relating to customer trading activities such as those arising from performance and customs bonds, warranties and indemnities.

Standby facilities and credit lines - under a loan commitment the Group agrees to make funds available to a customer in the future. Loan commitments, which are usually for a specified term may be unconditionally cancellable or may persist, provided all conditions in the loan facility are satisfied or waived. Commitments to lend include commercial standby facilities and credit lines, liquidity facilities to commercial paper conduits and unutilised overdraft facilities.

Other commitments - these include documentary credits, which are commercial letters of credit providing for payment by the Group to a named beneficiary against presentation of specified documents, forward asset purchases, forward deposits placed and undrawn note issuance and revolving underwriting facilities, and other short-term trade related transactions.

Capital support deed

As a pre-requisite of ring-fencing, from 1 November 2018 the Bank has left the RBS Group capital support deed and is now party to a new capital support deed comprising non ring-fenced bank UK entities. The new capital support deed has limited significance for NWM Plc as it is the only member bank and the other entities have modest capitalisations.

Contractual obligations for future expenditure not provided for in the accounts

The following table shows contractual obligations for future expenditure not provided for in the accounts at the year end.

	Group		Bank	
	2018	2017	2018	2017
	£m	£m	£m	£m
Operating leases				
Minimum rentals payable under non-cancellable leases (1)				
- within 1 year	17	4	11	3
- after 1 year but within 5 years	39	2	25	2
	56	6	36	5
Contracts to purchase goods or services	1	—	—	—
	57	6	36	5

Note:

(1) Predominantly property leases.

Trustee and other fiduciary activities

In its capacity as trustee or other fiduciary role, the Group may hold or place assets on behalf of individuals, trusts, companies,

pension schemes and others. The assets and their income are not included in the Group's financial statements. The Group earned fee income of nil from continuing operations (2017 - £1 million) from these activities.

Notes on the accounts

27 Memorandum items continued

Litigation, investigations and reviews

NWM Plc and its subsidiary and associated undertakings (the 'Group') are party to legal proceedings and the subject of investigation and other regulatory and governmental action ('Matters') in the United Kingdom (UK), the United States (US), the European Union (EU) and other jurisdictions.

The Group recognises a provision for a liability in relation to these Matters when it is probable that an outflow of economic benefits will be required to settle an obligation resulting from past events, and a reliable estimate can be made of the amount of the obligation.

In many proceedings and investigations, it is not possible to determine whether any loss is probable or to estimate reliably the amount of any loss, either as a direct consequence of the relevant proceedings and investigations or as a result of adverse impacts or restrictions on the Group's reputation, businesses and operations. Numerous legal and factual issues may need to be resolved, including through potentially lengthy discovery and document production exercises and determination of important factual matters, and by addressing novel or unsettled legal questions relevant to the proceedings in question, before a liability can reasonably be estimated for any claim. The Group cannot predict if, how, or when such claims will be resolved or what the eventual settlement, damages, fine, penalty or other relief, if any, may be, particularly for claims that are at an early stage in their development or where claimants seek substantial or indeterminate damages.

There are situations where the Group may pursue an approach that in some instances leads to a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, or in order to take account of the risks inherent in defending claims or investigations, even for those Matters for which the Group believes it has credible defences and should prevail on the merits. The uncertainties inherent in all such Matters affect the amount and timing of any potential outflows for both Matters with respect to which provisions have been established and other contingent liabilities.

The future outflow of resources in respect of any Matter may ultimately prove to be substantially greater than or less than the aggregate provision that the Group has recognised. Where (and as far as) liability cannot be reasonably estimated, no provision has been recognised.

Other than those discussed below, the Group is not involved in governmental, legal or regulatory proceedings (including those which are pending or threatened) that are expected to be material, individually or in aggregate. The Group expects that in future periods, additional provisions, settlement amounts and customer redress payments will be necessary, in amounts that are expected to be substantial in some instances.

For a discussion of certain risks associated with the Group's litigation, investigations and reviews, see the Risk Factor relating to legal, regulatory and governmental actions and investigations set out on page 132.

Litigation

Residential mortgage-backed securities (RMBS) litigation in the US

NWM Securities Inc. and certain affiliates continue to defend RMBS-related claims in the US in which plaintiffs allege that certain disclosures made in connection with the relevant offerings of RMBS contained materially false or misleading statements and/or omissions regarding the underwriting standards pursuant to which the mortgage loans underlying the RMBS were issued. The remaining RMBS lawsuits against Group companies consist of cases filed by the Federal Home Loan Banks of Boston and Seattle and the Federal Deposit Insurance Corporation that together involve the issuance of less than US\$1 billion of RMBS issued primarily from 2005 to 2007. In addition, NWM Securities Inc. previously agreed to settle a purported RMBS class action entitled *New Jersey Carpenters Health Fund v.*

Novastar Mortgage Inc. et al. for US\$55.3 million, which has been paid into escrow pending court approval of the settlement.

London Interbank Offered Rate (LIBOR) and other rates litigation

NWM Plc, certain of its subsidiaries, and RBSG (together, 'NWM defendants') are defendants in a number of class actions and individual claims pending in the US (primarily in the United States District Court for the Southern District of New York (SDNY)) with respect to the setting of LIBOR and certain other benchmark interest rates. The complaints allege that the NWM defendants and other panel banks violated various federal laws, including the US commodities and antitrust laws, and state statutory and common law, as well as contracts, by manipulating LIBOR and prices of LIBOR-based derivatives in various markets through various means.

Several class actions relating to USD LIBOR, as well as more than two dozen non-class actions concerning USD LIBOR, are part of a coordinated proceeding in the SDNY. In December 2016, the SDNY held that it lacks personal jurisdiction over NWM defendants with respect to certain claims. As a result of that decision, all NWM defendants have been dismissed from each of the USD LIBOR-related class actions (including class actions on behalf of over-the-counter plaintiffs, exchanged-based purchaser plaintiffs, bondholder plaintiffs, and lender plaintiffs), but six non-class cases in the coordinated proceeding remain pending against NWM defendants. The dismissal of NWM defendants for lack of personal jurisdiction is the subject of a pending appeal to the United States Court of Appeals for the Second Circuit.

Among the non-class claims dismissed by the SDNY in December 2016 were claims that the Federal Deposit Insurance Corporation (FDIC) had asserted on behalf of certain failed US banks. On 10 July 2017, the FDIC, on behalf of 39 failed US banks, commenced substantially similar claims against NWM Plc, RBSG, and others in the High Court of Justice of England and Wales. The action alleges that the defendants breached English and European competition law as well as asserting common law claims of fraud under US law.

In addition, there are two class actions against NWM defendants relating to JPY LIBOR and Euroyen TIBOR, both pending before the same judge in the SDNY. In the first class action, which relates to Euroyen TIBOR futures contracts, the court dismissed the plaintiffs' antitrust claims in March 2014, but declined to dismiss their claims under the Commodity Exchange Act for price manipulation, and the case is proceeding in the discovery phase. The second class action relates to other derivatives allegedly tied to JPY LIBOR and Euroyen TIBOR. The court dismissed that case on 10 March 2017 on the ground that the plaintiffs lack standing. The plaintiffs have commenced an appeal of that decision.

There is also a class action relating to the Singapore Interbank Offered Rate and Singapore Swap Offer Rate pending in the SDNY. In that case, the court denied defendants' motion to dismiss on 5 October 2018. The court's ruling would permit certain antitrust claims to proceed against NWM defendants and other non-RBS defendants, however, in November 2018, the defendants filed another motion to dismiss plaintiffs' claims.

Four other class action complaints were filed against NWM defendants in the SDNY, each relating to a different reference rate. In the case relating to Pound Sterling LIBOR, the court dismissed all claims against RBS companies, for various reasons, on 21 December 2018, and plaintiffs are seeking reconsideration of that decision. In the case relating to the Australian Bank Bill Swap Reference Rate, the court dismissed all claims against NWM defendants for lack of personal jurisdiction on 26 November 2018, but plaintiffs have filed an amended complaint, which will be the subject of a further motion to dismiss. In the case relating to Euribor, the court dismissed all claims against NWM Plc (the only NWM defendant in that case) for lack of personal jurisdiction on 21 February 2017. In the case relating to Swiss Franc LIBOR, the court dismissed all claims against all defendants on

Notes on the accounts

27 Memorandum items continued

Litigation, investigations and reviews

various grounds on 25 September 2017, but held that it has personal jurisdiction over NWM Plc and allowed the plaintiffs to replead their complaint. Defendants' renewed motion to dismiss the amended complaint relating to Swiss Franc LIBOR remains pending.

NWM Plc has also been named as a defendant in a motion to certify a class action relating to LIBOR in the Tel Aviv District Court in Israel.

NWM Plc is defending a claim in the High Court in London brought by London Bridge Holdings Ltd and others, in which the claimants allege LIBOR manipulation in connection with the sale of interest rate hedging products. The sum claimed in that case is £446.7 million.

On 4 February 2019, a claim was issued against NWM Plc by London Borough of Newham, in respect of certain lender option borrower option (LOBO) loans.

Details of UK litigation claims in relation to the alleged mis-sale of interest rate hedging products (IRHPs) involving LIBOR-related allegations are set out under 'Interest rate hedging products litigation' on page 113.

In January 2019, a class action antitrust complaint was filed in the SDNY alleging that the defendants (USD ICE LIBOR panel banks and affiliates) have conspired to suppress USD ICE LIBOR from 2014 to the present by submitting incorrect information to ICE about their borrowing costs. The defendants include RBSG, NWM Plc, NWM Securities Inc., and NatWest Bank Plc.

FX antitrust litigation

NWM Plc, NWM Securities Inc., and RBSG are defendants in several cases relating to NWM Plc's foreign exchange (FX) business, each of which is pending before the same federal judge in the SDNY.

In 2015, these NWM defendants paid US\$255 million to settle the consolidated antitrust class action on behalf of persons who entered into over-the-counter FX transactions with defendants or who traded FX instruments on exchanges. That settlement received final court approval in August 2018. On 7 November 2018, some members of the settlement class who opted out of the settlement filed their own non-class complaint in the SDNY asserting antitrust claims against RBS companies and others. On 31 December 2018, some of the same claimants, as well as others, filed proceedings in the High Court in London, asserting competition claims against NWM Plc and several other banks.

Two other FX-related class actions remain pending. First, there is a class action on behalf of 'consumers and end-user businesses,' which is proceeding in the discovery phase following the SDNY's denial of the defendants' motions to dismiss in March 2018. Second, there is a class action on behalf of 'indirect purchasers' of FX instruments (which plaintiffs define as persons who transacted FX instruments with retail foreign exchange dealers that transacted directly with defendant banks). That case is also proceeding in discovery following the SDNY's denial of defendants' motion to dismiss on 25 October 2018.

Group companies have also been named as defendants in two motions to certify FX-related class actions in the Tel Aviv District Court in Israel.

Certain other foreign exchange transaction related claims have been or may be threatened against Group companies. RBS Group cannot predict whether any of these claims will be pursued, but expects that some may.

US Treasury securities antitrust litigation

NWM Securities Inc. is a defendant in a consolidated antitrust class action pending in the SDNY on behalf of persons who transacted in US Treasury securities or derivatives based on such instruments, including futures and options. The plaintiffs allege that defendants rigged the US Treasury securities auction bidding process to deflate

prices at which they bought such securities and colluded to increase the prices at which they sold such securities to plaintiffs. The defendants' motion to dismiss this matter remains pending.

Swaps antitrust litigation

NWM Plc, NWM Securities Inc., and RBSG, as well as a number of other interest rate swap dealers, are defendants in several cases pending in the SDNY alleging violations of the US antitrust laws in the market for interest rate swaps. There is a consolidated class action complaint on behalf of persons who entered into interest rate swaps with the defendants, as well as non-class action claims by three swap execution facilities (TeraExchange, Javelin, and trueEx). The plaintiffs allege that the swap execution facilities would have successfully established exchange-like trading of interest rate swaps if the defendants had not unlawfully conspired to prevent that from happening through boycotts and other means. Discovery in these cases is ongoing.

In addition, on 8 June 2017, TeraExchange filed a complaint against NWM Plc, NWM Securities Inc., and RBSG, as well as a number of other credit default swap dealers, in the SDNY. TeraExchange alleges it would have established exchange-like trading of credit default swaps if the defendant dealers had not engaged in an unlawful antitrust conspiracy. On 1 October 2018, the court dismissed all claims against NWM Plc, NWM Securities Inc., and RBSG.

Thornburg adversary proceeding

NWM Securities Inc. and certain affiliates, as well as several other financial institutions, were defendants in an adversary proceeding filed in the US bankruptcy court in Maryland by the trustee for TMST, Inc. (formerly known as Thornburg Mortgage, Inc.). The trustee sought recovery of transfers made under certain restructuring agreements as avoidable fraudulent and preferential transfers. On 26 October 2018, the bankruptcy court approved a US\$23.5 million settlement of this matter. Group companies have paid this settlement amount, which was covered by a provision existing as of 30 September 2018.

Interest rate hedging products and similar litigation

NWM Plc is dealing with a number of active litigation claims in the UK in relation to the alleged mis-selling of interest rate hedging products (IRHPs). In general claimants allege that the relevant IRHPs were mis-sold to them, with some also alleging that misrepresentations were made in relation to LIBOR. Claims have been brought by customers who were considered under the UK Financial Conduct Authority (FCA) redress programme for IRHPs, as well as customers who were outside of the scope of that programme, which was closed to new entrants on 31 March 2015. NWM Plc remains exposed to potential claims from customers who were either ineligible to be considered for redress or who are dissatisfied with their redress offers.

Property Alliance Group (PAG) v NatWest Markets Plc was the leading case before the English High Court involving both IRHP mis-selling and LIBOR misconduct allegations. The amount claimed was £34.8 million and the trial ended in October 2016. In December 2016 the Court dismissed all of PAG's claims. PAG appealed that decision, and the Court of Appeal's judgment dismissing the appeal was handed down on 2 March 2018. On 24 July 2018 the Supreme Court declined the request from PAG for permission to appeal an aspect of the judgment relating to implied representations of Sterling LIBOR rates. The Court of Appeal's decision may impact other IRHP and LIBOR-related cases currently pending in the English courts, some of which involve substantial amounts.

Separately, NWM Plc is defending claims filed in France by five French local authorities relating to structured interest rate swaps. The plaintiffs allege, among other things, that the swaps are void for being illegal transactions, that they were mis-sold, and that information / advisory duties were breached. One of the claims is now at an end following the Court of Appeal's dismissal of the claim, and is not being appealed to the Supreme Court. Three of the claims were also dismissed but are subject to appeal to the Supreme Court. The fifth claim remains to be heard before the lower courts.

Notes on the accounts

27 Memorandum items continued

Litigation, investigations and reviews

Tax dispute

HMRC issued a tax assessment in 2012 against NWM Plc for approximately £86 million regarding a value-added-tax ('VAT') matter in relation to the trading of European Union Allowances ('EUAs') by an RBS joint venture subsidiary in 2009. RBS has lodged an appeal, which is still to be heard, before the First-tier Tribunal (Tax), a specialist tax tribunal, challenging the assessment (the 'Tax Dispute'). In the event that the assessment is upheld, interest and costs would be payable, and a penalty of up to 100 per cent of the VAT held to have been legitimately denied by HMRC could also be levied. Separately, NWM Plc is a named defendant in civil proceedings before the High Court brought in 2015 by ten companies (all in liquidation) (the 'Liquidated Companies') and their respective liquidators (together, 'the Claimants'). The Liquidated Companies previously traded in EUAs in 2009 and are alleged to be defaulting traders within (or otherwise connected to) the EUA supply chains forming the subject of the Tax Dispute. The Claimants claim approximately £71.4 million plus interest and costs and allege that NWM Plc dishonestly assisted the directors of the Liquidated Companies in the breach of their statutory duties and/or knowingly participated in the carrying on of the business of the Liquidated Companies with intent to defraud creditors. The trial in that matter concluded on 20 July 2018 and judgment is awaited.

US Anti-Terrorism Act litigation

NWM Plc, NWM N.V. and certain other financial institutions are defendants in an action pending in the SDNY, filed in November 2017, by a number of US nationals (or their estates, survivors, or heirs), most of whom are or were US military personnel, who were killed or injured in attacks in Iraq between 2003 and 2011. The attacks were allegedly perpetrated by Hezbollah and certain Iraqi terror cells allegedly funded by the Islamic Republic of Iran. According to the plaintiffs' allegations, defendants are liable for damages arising from the attacks because they allegedly conspired with Iran and certain Iranian banks to assist Iran in transferring money to Hezbollah and the Iraqi terror cells, in violation of the US Anti-Terrorism Act, by agreeing to engage in 'stripping' of transactions initiated by the Iranian banks so that the Iranian nexus to the transactions would not be detected. The defendants have made a motion to dismiss this matter which is currently pending.

Securities underwriting litigation

NWM Securities Inc. is an underwriter defendant in several securities class actions in the US in which plaintiffs generally allege that an issuer of public debt or equity securities, as well as the underwriters of the securities (including NWM Securities Inc.), are liable to purchasers for misrepresentations and omissions made in connection with the offering of such securities.

Investigations and reviews

The Group's financial condition can be affected by the actions of various governmental and regulatory authorities in the UK, the US, the EU and elsewhere. Group companies have engaged, and will continue to engage, in discussions with relevant governmental and regulatory authorities, including in the UK, the US, the EU and elsewhere, on an ongoing and regular basis, and in response to informal and formal inquiries or investigations, regarding operational, systems and control evaluations and issues including those related to compliance with applicable laws and regulations, including consumer protection, business conduct, competition/anti-trust, anti-bribery, anti-money laundering and sanctions regimes.

Group companies have been providing, and continue to provide, information regarding a variety of matters, including, for example, the setting of benchmark rates and related derivatives trading, conduct in the foreign exchange market, and various issues relating to the issuance, underwriting, and sales and trading of fixed-income securities, including structured products and government securities, some of which have resulted, and others of which may result, in investigations or proceedings.

Any matters discussed or identified during such discussions and inquiries may result in, among other things, further inquiry or investigation, other action being taken by governmental and regulatory authorities, increased costs being incurred by the Group, remediation of systems and controls, public or private censure, restriction of the Group's business activities and/or fines. Any of the events or circumstances mentioned in this paragraph or below could have a material adverse effect on the Group, its business, authorisations and licences, reputation, results of operations or the price of securities issued by it.

The Group is co-operating fully with the investigations and reviews described below.

RMBS and other securitised products investigations

In the US, Group companies, including NWM Securities Inc., and its affiliates, have in recent years been involved in investigations relating to, among other things, issuance, underwriting and trading in RMBS and other mortgage-backed securities and collateralised debt obligations (CDOs).

Investigations by the US Department of Justice (DoJ) and certain state attorneys general relating to the issuance and underwriting of RMBS were resolved in 2018. Certain other state attorneys general have sought information regarding similar issues, and the Group is aware that at least one such investigation is ongoing.

In October 2017, NWM Securities Inc. entered into a non-prosecution agreement (NPA) with the United States Attorney for the District of Connecticut (USAO) in connection with alleged misrepresentations to counterparties relating to secondary trading in various forms of asset-backed securities. As part of the NPA, the USAO agreed not to file criminal charges relating to certain conduct and information described in the NPA if NWM Securities Inc. complies with the terms of the NPA. In October 2018, NWM Securities Inc. agreed to a six-month extension of the NPA while the USAO reviews the circumstances of an unrelated matter reported during the course of the NPA.

US mortgages - loan repurchase matters

Group companies in North America, including NWM Securities Inc. and its affiliates, were purchasers of non-agency residential mortgages in the secondary market, and an issuer and underwriter of non-agency RMBS, and in some circumstances, made certain representations and warranties regarding the characteristics of the underlying loans. As a result, NatWest Markets may be, or may have been, contractually required to repurchase such loans or indemnify certain parties against losses for certain breaches of such representations and warranties. Depending on the extent to which such loan repurchase related claims are pursued against and not rebutted by Group companies on timeliness or other grounds, the aggregate potential impact on Group companies, if any, may be material.

Foreign exchange related investigations

In 2014 and 2015, NWM Plc paid significant penalties to resolve investigations into its FX business by the FCA, the CFTC, the DoJ, and the Board of Governors of the Federal Reserve System (Federal Reserve). As part of its plea agreement with the DoJ, NWM Plc pled guilty to a one-count information charging an antitrust conspiracy occurring between as early as December 2007 to at least April 2010. NWM Plc admitted that it knowingly, through one of its euro/US dollar currency traders, joined and participated in a conspiracy to eliminate competition in the purchase and sale of the euro/US dollar currency pair exchanged in the FX spot market. On 5 January 2017, the United States District Court for the District of Connecticut imposed a sentence on NWM Plc consisting of a US\$395 million fine and a three-year probation, which among other things, prohibits NWM Plc from committing another crime in violation of US law or engaging in the FX trading practices that form the basis for the charged crime and requires NWM Plc to implement a compliance program designed to prevent and detect the unlawful conduct at issue and to strengthen its

Notes on the accounts

27 Memorandum items continued

Litigation, investigations and reviews

compliance and internal controls as required by other regulators (including the FCA and the CFTC). A violation of the terms of probation could lead to the imposition of additional penalties.

As part of the settlement with the Federal Reserve, NWM Plc and NWM Securities Inc. entered into a cease and desist order (the FX Order). In the FX Order, which is publicly available and will remain in effect until terminated by the Federal Reserve, NWM Plc and NWM Securities Inc. agreed to take certain remedial actions with respect to FX activities and certain other designated market activities, including the creation of an enhanced written internal controls and compliance program, an improved compliance risk management program, and an enhanced internal audit program. NWM Plc and NWM Securities Inc. are obligated to implement and comply with these programs as approved by the Federal Reserve, and are also required to conduct, on an annual basis, a review of applicable compliance policies and procedures and a risk-focused sampling of key controls.

NWM Plc and other Group companies are co-operating with investigations and responding to inquiries from other governmental and regulatory (including competition) authorities on similar issues relating to failings in NWM Plc's FX business. The timing and amount of financial penalties with respect to any further settlements and related litigation risks and collateral consequences remain uncertain and may well be material.

Systematic Anti-Money Laundering Programme assessment

In December 2018, the FCA commenced a Systematic Anti-Money Laundering Programme assessment of RBS Group. RBS Group is responding to requests for information from the FCA.

US/Swiss tax programme

In December 2015, Coutts & Co Ltd., a member of the Group incorporated in Switzerland, entered into a non-prosecution agreement (the NPA) with the DoJ. This was entered into as part of the DoJ's programme for Swiss banks, related to its investigations of the role that Swiss banks played in concealing the assets of US tax payers in offshore accounts (US related accounts). Coutts & Co Ltd. paid a US\$78.5 million penalty and acknowledged responsibility for certain

conduct set forth in a statement of facts accompanying the agreement. Under the NPA, which has a term of four years, Coutts & Co Ltd. is required, among other things, to provide certain information, cooperate with the DoJ's investigations, and commit no U.S. federal offences. If Coutts & Co Ltd. abides by the NPA, the DoJ will not prosecute it for certain tax-related and monetary transaction offences in connection with US related accounts.

Since the signing of the NPA in 2015, Coutts & Co Ltd has identified and disclosed to the DoJ a number of US related accounts that were not included in its original submission supporting the NPA. Coutts & Co Ltd is in discussions with the DoJ regarding these additional accounts and has agreed with the DoJ to undertake additional review work, which is ongoing.

Enforcement proceedings and investigations in relation to Coutts & Co Ltd

In February 2017, the Swiss Financial Market Supervisory Authority (FINMA) took enforcement action against Coutts & Co Ltd with regard to failures of money laundering checks and controls on certain client accounts that were connected with the Malaysian sovereign wealth fund, 1MDB, and were held with Coutts & Co Ltd. FINMA accordingly required Coutts & Co Ltd to disgorge profits of CHF 6.5 million. There are two administrative criminal proceedings pending before the Swiss Finance Department against two former employees of Coutts & Co Ltd. In addition, the Monetary Authority of Singapore (MAS)'s supervisory examination of Coutts & Co Ltd's Singapore branch revealed breaches of anti-money laundering requirements. MAS imposed on Coutts & Co Ltd financial penalties amounting to SGD 2.4 million in December 2016.

In addition, Coutts & Co Ltd continues to assist with investigations and enquiries from authorities where requested to do so.

Notes on the accounts

28 Analysis of the net investment in business interests and intangible assets

	Group		Bank	
	2018 £m	2017 £m	2018 £m	2017 £m
Acquisitions and disposals				
Fair value given for businesses acquired	(48)	(131)	—	—
Value recognised for business transferred from fellow subsidiary	(496)	(438)	—	(318)
Non-cash consideration on acquisition	—	—	292	32,546
Additional and new investments in Group undertakings	—	—	(920)	(32,648)
Net outflow of cash in respect of acquisitions	(544)	(569)	(628)	(420)
Net inflow/(outflow) of cash in respect of disposals	2,089	2,863	22,373	1,498
Dividends received from associates	2	—	—	—
Cash expenditure on intangible assets	—	(382)	—	(366)
Net (outflow)/inflow	1,547	1,912	21,745	712

29 Analysis of changes in financing during the year

	Group			
	Share capital, share premium and merger reserve		Subordinated liabilities	
	2018 £m	2017 £m	2018 £m	2017 £m
At 1 January	44,297	44,297	—	19,515
Issue of Additional Tier 1 Capital notes	749	—	—	—
Redemption of subordinated liabilities	—	—	(3,769)	(9,624)
Net cash outflow from financing	749	—	(3,769)	(9,624)
Release of merger reserve	(10,881)	—	—	—
Court approved distribution	(33,901)	—	—	—
Currency translation and other adjustments ⁽¹⁾	2,644	—	6,389	(9,891)
At 31 December	2,908	44,297	2,620	—

	Bank			
	Share capital, share premium and merger reserve		Subordinated liabilities	
	2018 £m	2017 £m	2018 £m	2017 £m
At 1 January	33,416	33,416	—	17,870
Redemption of subordinated liabilities	—	—	(3,769)	(9,431)
Net cash outflow from financing	749	—	(3,769)	(9,431)
Court approved distribution	(33,901)	—	—	—
Currency translation and other adjustments ⁽¹⁾	2,644	—	6,389	(8,439)
At 31 December	2,908	33,416	2,620	—

Note:

(1) Includes the redemption of preference shares issued by the Bank to the parent company, RBSG, which were redeemed in 2018

30 Analysis of cash and cash equivalents

	Group ⁽¹⁾		Bank ⁽¹⁾	
	2018 £m	2017 £m	2018 £m	2017 £m
At 1 January				
- cash	153	87,694	93	85,730
- cash equivalents	25,530	10,333	12,965	13,343
	25,683	98,027	13,058	99,073
Net cash (outflow)/inflow	444	(72,344)	11,517	(86,015)
At 31 December	26,127	25,683	24,575	13,058
Comprising:				
Cash and balances at central banks	11,188	153	11,095	93
Treasury bills and debt securities	83	170	83	427
Loans to banks	14,856	25,360	13,397	12,538
Cash and cash equivalents	26,127	25,683	24,575	13,058

Notes:

(1) Includes cash collateral posted with bank counterparties in respect of derivative liabilities of £7,255 million (2017 - £6,883 million, 2016 - £6,653 million).

Certain members of the Group are required by law or regulation to maintain balances with the central banks in the jurisdictions in which they operate. These balances are set out below.

	2018	2017	2016
Bank of England	£0.1bn	£0.6bn	£0.5bn

Notes on the accounts

31 Directors' and key management remuneration

As noted in the Strategic Report the composition of the Board changed significantly on 30 April 2018.

Up to 30 April 2018 the executive directors of the Bank were also directors of the ultimate holding company and were remunerated for their services to the RBS Group as a whole. The Bank did not remunerate these executive directors in this period nor could their remuneration be apportioned in respect of their services to the Bank.

From the 30 April 2018 the executive directors of the Bank are Richard Place and Chris Marks, who are employed by the Bank and are remunerated by the Bank for their services to RBS Group as a whole but are not directors of RBSG.

The directors' emoluments in the table below represents the emoluments of the new executive and non-executive directors for the period from which they were appointed in 2018 and the remuneration of the RBSG directors as disclosed in the RBS Group Annual Report and Accounts for the period before their resignation in 2018 and for 2017. Where directors of the Bank are also directors of RBSG, details of their share interests can be found in the 2018 Annual Report and Accounts of the RBS Group, in line with regulations applying to RBSG as a premium listed company.

	2018		2017
	Bank £000	RBS Group £000	RBS Group £000
Directors' remuneration			
Non Executive Directors	460	519	1,747
Chairman and executive directors			
- emoluments	2,396	1,690	5,299
	2,856	2,209	7,046
Amounts receivable under long-term incentive and share option plans	—	—	1,225
Total	2,856	2,209	8,271

The total emoluments and amounts receivable under long-term incentive plans and share option plans of the highest paid director were £1,404k (2017 £3,688k).

No directors accrued benefits under defined benefit schemes or money purchase schemes during 2018 and 2017.

The executive directors may participate in the RBS Group's long-term incentive plans, executive share option and sharesave schemes.

Compensation of key management

The compensation of key management also changed significantly in 2018. Until the changes in April 2018 key management represented the RBS Group directors and Executive Committee members and is presented as disclosed in the RBS Group Annual Report and Accounts. From April 2018 key management is the Bank's directors and Executive Committee and the emoluments presented below represent the period from which they were appointed in 2018.

	2018		2017
	Bank £000	RBS Group £000	RBS Group £000
Short term benefits	22,143	2,209	19,019
Post employment benefits	(4)	—	434
Share based payments	—	—	3,558
	22,139	2,209	23,011

32 Transactions with directors and key management

At 31 December 2018, amounts outstanding in relation to transactions, arrangements and agreements entered into by authorised institutions in the Group, as defined in UK legislation, were £12,165 in respect of loans to two persons who were directors of the company at any time during the financial period.

For the purposes of IAS 24 'Related Party Disclosures', key management comprise directors of the company and members of the Bank Executive Committee. Applying the captions in the Group's primary financial statements the following amounts(1) are attributable, in aggregate, to key management.

	2018 £000	2017 £000
Loans to customers	12	3,942
Customer deposits	2,950	23,619

Key management have banking relationships with Group entities which are entered into in the normal course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with other persons of a similar standing or, where applicable, with other employees. These transactions did not involve more than the normal risk of repayment or present other unfavourable features. Key management had no reportable transactions or balances with the holding company.

Note:

(1) Amounts are attributed to each person at their highest level of RBS Group key management.

Notes on the accounts

33 Adoption of IFRS 9

The Group's accounting policies have significantly changed on the adoption of IFRS 9 'Financial Instruments' with effect from 1 January 2018. Prior years are re-presented but there has been no restatement of prior year data.

IFRS 9 changed the classification categories of financial assets from IAS 39. Held-for-trading assets were classified to mandatory fair value through profit or loss; loans and receivables were classified to amortised cost; and available-for-sale assets were classified as fair value through other comprehensive income unless they were deemed to be in a fair value business model or failed the contractual cash flow requirements under IFRS 9. There were no changes in the classification and measurement of financial liabilities.

Loans to customers of £99 million were reclassified from loans and receivables under IAS 39 to fair value through profit or loss under IFRS 9. As a result, their carrying value increased by £30 million.

The net increase to loan impairments under IAS 39 was £617 million under the expected credit loss requirements of IFRS 9, including £82 million under provisions for contingent liabilities and commitments.

The impact on the Group's balance sheet at 1 January 2018 and the key movements in relation to the impact on classification and measurement expected credit losses and tax are as follows:

	Group				IFRS 9 impact			1 January 2018 (IFRS 9) £m
	31 December 2017 (IAS 39) £m	Changes to presentation Held-for-trading exported to trading assets/liabilities £m	New presentation £m	31 December 2017 re-presented £m	Classification & measurement £m	Expected credit losses £m	Tax £m	
Assets								
Cash and balances at central banks	153	—	—	153	—	—	—	153
Trading assets		85,932	—	85,932	—	—	—	85,932
Derivatives		—	159,278	159,278	—	—	—	159,278
Settlement balances		—	2,497	2,497	—	—	—	2,497
Loans and advances to banks	19,262	(18,690)	(572)	—	—	—	—	—
Loans to banks - amortised cost		—	371	371	—	(2)	—	369
Loans and advances to customers	49,374	(39,736)	(9,638)	—	—	—	—	—
Loans to customers - amortised cost		—	9,638	9,638	(99)	(27)	—	9,512
Amounts due from holding company and fellow subsidiaries		—	216	216	—	—	—	216
Debt securities	30,539	(27,481)	(3,058)	—	—	—	—	—
Equity shares	87	(25)	(62)	—	—	—	—	—
Other financial assets		—	3,120	3,120	170	—	—	3,290
Settlement balances	2,512	—	(2,512)	—	—	—	—	—
Derivatives	159,278	—	(159,278)	—	—	—	—	—
Other assets	465,032	—	—	465,032	486	(506)	(25)	464,987
Total assets	726,237	—	—	726,237	557	(535)	(25)	726,234
Liabilities								
Deposits by banks	17,093	(16,486)	(607)	—	—	—	—	—
Bank deposits		—	528	528	—	—	—	528
Customer accounts	39,103	(35,840)	(3,263)	—	—	—	—	—
Customer deposits		—	3,257	3,257	—	—	—	3,257
Amounts due to holding company and fellow subsidiaries		—	90	90	—	—	—	90
Debt securities in issue	12,362	(1,107)	(11,255)	—	—	—	—	—
Settlement balances	2,818	—	(1)	2,817	—	—	—	2,817
Trading liabilities		81,960	—	81,960	—	—	—	81,960
Short positions	28,527	(28,527)	—	—	—	—	—	—
Derivatives	153,330	—	—	153,330	—	—	—	153,330
Other financial liabilities		—	11,255	11,255	—	—	—	11,255
Other liabilities	437,744	—	(4)	437,740	—	82	(9)	437,813
Total liabilities	690,977	—	—	690,977	—	82	(9)	691,050
Total equity	35,260	—	—	35,260	557	(617)	(16)	35,184
Total liabilities and equity	726,237	—	—	726,237	557	(535)	(25)	726,234

Notes on the accounts

33 Adoption of IFRS 9 continued

	Bank			31 December 2017 re-presented £m	Classification & measurement £m	Expected credit losses £m	Tax £m	1 January 2018 (IFRS 9) £m
	31 December 2017 (IAS 39) £m	Changes to presentation	New presentation £m					
		Held-for-trading exported to trading assets/liabilities £m						
Assets								
Cash and balances at central banks	93	—	—	93	—	—	—	93
Trading assets	—	73,011	—	73,011	—	—	—	73,011
Derivatives	—	—	162,005	162,005	—	—	—	162,005
Settlement balances	—	—	1,614	1,614	—	—	—	1,614
Loans and advances to banks	18,814	(15,529)	(3,285)	—	—	—	—	—
Loans to banks - amortised cost	—	—	195	195	—	—	—	195
Loans and advances to customers	45,658	(33,893)	(11,765)	—	—	—	—	—
Loans to customers - amortised cost	—	—	9,133	9,133	(73)	(18)	—	9,042
Amounts due from holding company and fellow subsidiaries	—	—	6,470	6,470	—	9	—	6,479
Debt securities	27,334	(23,565)	(3,769)	—	—	—	—	—
Equity shares	50	(24)	(26)	—	—	—	—	—
Investment in group undertakings	496	—	(496)	—	—	—	—	—
Other financial assets	—	—	3,079	3,079	71	1	—	3,151
Settlement balances	1,640	—	(1,640)	—	—	—	—	—
Derivatives	162,005	—	(162,005)	—	—	—	—	—
Investment in group undertakings	—	—	496	496	—	—	—	496
Other assets	269,799	—	(6)	269,793	548	(140)	(121)	270,080
Total assets	525,889	—	—	525,889	546	(148)	(121)	526,166
Liabilities								
Deposits by banks	18,304	(14,816)	(3,488)	—	—	—	—	—
Bank deposits	—	—	527	527	—	—	—	527
Customer accounts	37,097	(22,052)	(15,045)	—	—	—	—	—
Customer deposits	—	—	3,063	3,063	—	—	—	3,063
Amounts due to holding company and fellow subsidiaries	—	—	14,994	14,994	—	—	—	14,994
Debt securities in issue	12,362	(1,107)	(11,255)	—	—	—	—	—
Settlement balances	1,411	—	(39)	1,372	—	—	—	1,372
Trading liabilities	—	64,182	—	64,182	—	—	—	64,182
Short positions	26,207	(26,207)	—	—	—	—	—	—
Derivatives	155,098	—	—	155,098	—	—	—	155,098
Other financial liabilities	—	—	11,255	11,255	—	—	—	11,255
Other liabilities	230,888	—	(12)	230,876	—	31	—	230,907
Total liabilities	481,367	—	—	481,367	—	31	—	481,398
Total equity	44,522	—	—	44,522	546	(179)	(121)	44,768
Total liabilities and equity	525,889	—	—	525,889	546	(148)	(121)	526,166

The table below reflects the impact of IFRS 9 on total equity:

	Group £m	Bank £m
At 31 December 2017 - under IAS 39	35,260	44,522
Classification & measurement	557	546
- Mandatory fair value through profit or loss assets - adjustments following business model reviews (SPPI) ⁽¹⁾	578	544
- Equity shares held at cost under IAS 39 - fair value adjustments through FVOCI reserve	45	(1)
- Additional write-down of amortised cost assets	(66)	3
Expected credit losses	(617)	(179)
- Amortised cost assets	(535)	(148)
- Contingent liabilities and commitments	(82)	(31)
Tax	(16)	(121)
At 1 January 2018 - under IFRS on transition to IFRS 9	35,184	44,768

Note:

(1) Includes £582 million credit in relation to Loans to customers and £4 million debit in relation to debt securities.

Notes on the accounts

34 Related parties

UK Government

On 1 December 2008, the UK Government through HM Treasury became the ultimate controlling party of The Royal Bank of Scotland Group plc. The UK Government's shareholding is managed by UK Government Investments Limited, a company wholly owned by the UK Government. As a result, the UK Government and UK Government controlled bodies became related parties of the Group.

In 2015, HM Treasury sold 630 million of RBS Group's ordinary shares. In June 2018 HMT sold a further 925 million. At 31 December 2018, HM Treasury's holding in the RBS Group's ordinary shares was 62.3%.

The Group enters into transactions with many of these bodies on an arm's length basis. Transactions include the payment of: taxes principally UK corporation tax (refer to Note 7) and value added tax; national insurance contributions; local authority rates; and regulatory fees and levies; together with banking transactions such as loans and deposits undertaken in the normal course of banker-customer relationships.

Bank of England facilities

The Group may participate in a number of schemes operated by the Bank of England in the normal course of business.

Members of the Group that are UK authorised institutions are required to maintain non-interest bearing (cash ratio) deposits with the Bank of England amounting to 0.296% of their average eligible liabilities in excess of £600 million. They also have access to Bank of England reserve accounts: sterling current accounts that earn interest at the Bank of England Rate.

The table below discloses items included in income and operating expenses on transactions between the Group and fellow subsidiaries of the RBS Group.

	2018 £m	2017 £m	2016 £m
Interest receivable	53	1	-
Interest payable	(315)	(7)	(1)
Fees and commissions receivable	3	1	1
Fees and commissions payable	(8)	-	-
Continuing operations	(267)	(5)	-
Discontinued operations	(720)	(1,031)	(950)

35 Ultimate holding company

The Group's ultimate holding company is The Royal Bank of Scotland Group plc which is incorporated in Great Britain and registered in Scotland. As at 31 December 2018, The Royal Bank of Scotland Group plc heads the largest group in which the Group is consolidated. Copies of the consolidated accounts may be obtained from The Secretary, The Royal Bank of Scotland Group plc, Gogarburn, PO Box 1000, Edinburgh EH12 1HQ.

Following placing and open offers by The Royal Bank of Scotland Group plc in December 2008 and April 2009, the UK Government, through HM Treasury, currently holds 62.3% of the issued ordinary share capital of the holding company and was therefore the Group's ultimate controlling party.

Other related parties

- (a) In their roles as providers of finance, Group companies provide development and other types of capital support to businesses. These investments are made in the normal course of business and on arm's length terms. In some instances, the investment may extend to ownership or control over 20% or more of the voting rights of the investee company. However, these investments are not considered to give rise to transactions of a materiality requiring disclosure under IAS 24.
- (b) The Group recharges The Royal Bank of Scotland Group Pension Fund with the cost of administration services incurred by it. The amounts involved are not material to the Group.
- (c) In accordance with IAS 24, transactions or balances between Group entities that have been eliminated on consolidation are not reported.
- (d) The captions in the primary financial statements of the parent company include amounts attributable to subsidiaries. These amounts have been disclosed in aggregate in the relevant notes to the financial statements.

36 Post balance sheet events

There have been no other significant events between 31 December 2018 and the date of approval of these accounts which would require a change to or additional disclosure in the accounts.

Notes on the accounts

37 Related undertakings

Group legal entities and activities at 31 December 2018

In accordance with the Companies Act 2006, the company's related undertakings and the accounting treatment for each are listed below. All undertakings are wholly-owned by the company or subsidiaries of the company and are consolidated by reason of contractual control (Section 1162(2) CA 2006), unless otherwise indicated. Group interest refers to ordinary shares of equal values and voting rights unless further analysis is provided in the notes. Activities are classified in accordance with Annex I to the Capital Requirements Directive ("CRD IV") and the definitions in Article 4 of the Capital Requirements Regulation.

The following table details active related undertakings incorporated in the UK which are 100% owned by the Group and fully consolidated for accounting purposes.

Entity name	Activity	Regulatory treatment	Notes	Entity name	Activity	Regulatory treatment	Notes
280 Bishopsgate Finance Ltd.	INV	FC	(6)	R.B. Leasing (December) Ltd	BF	FC	(31)
Care Homes 1 Ltd	BF	FC	(6)	R.B. Leasing Company Ltd	BF	FC	(5)
Care Homes 2 Ltd	BF	FC	(6)	R.B.S. Special Investments Ltd	BF	FC	(6)
Care Homes 3 Ltd	BF	FC	(6)	RB Investments 3 Ltd	OTH	FC	(6)
Care Homes Holdings Ltd	BF	FC	(6)	RBDC Administrator Ltd	SC	FC	(5)
Churchill Management Ltd	BF	FC	(2)	RBOS (UK) Ltd	BF	FC	(6)
Desertlands Entertainment Ltd	BF	FC	(31)	RBS Asset Management Ltd	BF	FC	(6)
Distant Planet Productions Ltd	BF	FC	(31)	RBS Equities Holdings (UK) Ltd	BF	FC	(6)
Helena Productions Ltd	BF	FC	(31)	RBS Investment Ltd	BF	FC	(5)
Lombard Corporate Finance (11) Ltd	BF	FC	(31)	RBS Management Services (UK) Ltd	SC	FC	(6)
Lombard Corporate Finance (13) Ltd	BF	FC	(31)	RBS Mezzanine Ltd	BF	FC	(5)
Lombard Corporate Finance (14) Ltd	BF	FC	(31)	RBS Property Developments Ltd	INV	FC	(11)
Lombard Corporate Finance (15) Ltd	BF	FC	(31)	RBS Property Ventures Investments Ltd	BF	FC	(5)
Lombard Corporate Finance (6) Ltd	BF	FC	(31)	RBSM Capital Ltd	BF	FC	(5)
Lombard Corporate Finance (7) Ltd	BF	FC	(31)	RBSSAF (12) Ltd	BF	FC	(31)
Nanny McPhee Productions Ltd	BF	FC	(31)	RBSSAF (6) Ltd	BF	FC	(31)
National Westminster Home Loans Ltd	BF	FC	(6)	RoboScot Equity Ltd	BF	FC	(5)
NatWest Markets Secretarial Services Ltd	SC	FC	(6)	Royal Bank Investments Ltd	BF	FC	(5)
NatWest Markets Secured Funding LLP	BF	FC	(10)	Royal Bank Ventures Investments Ltd	BF	FC	(5)
P of A Productions Ltd	BF	FC	(31)	RoyScot Financial Services Ltd	BF	FC	(6)
Patalex II Productions Ltd	BF	FC	(31)	Sandford Leasing Ltd	BF	FC	(31)
Patalex III Productions Ltd	BF	FC	(31)	Style Financial Services Ltd	BF	FC	(5)
Patalex IV Productions Ltd	BF	FC	(31)	Theobald Film Productions LLP	BF	FC	(31)
Patalex Productions Ltd	BF	FC	(31)	Total Capital Finance Ltd	BF	DE	(2)
Patalex V Productions Ltd	BF	FC	(31)	West Register (Hotels Number 1) Ltd	INV	DE	(5)
Price Productions Ltd	BF	FC	(31)	West Register (Hotels Number 3) Ltd	INV	DE	(5)
Priority Sites Investments Ltd	BF	DE	(6)	West Register (Property Investments) Ltd	BF	DE	(5)
Priority Sites Ltd	INV	DE	(6)	West Register (Realisations) Ltd	INV	DE	(5)
Property Venture Partners Ltd	INV	FC	(5)	West Register Hotels (Holdings) Ltd	BF	FC	(5)
R.B. Equipment Leasing Ltd	BF	FC	(31)	Winchcombe Finance Ltd	BF	FC	(31)
R.B. Leasing (April) Ltd	BF	FC	(31)				

Notes on the accounts

37 Related undertakings continued

The following table details active related undertakings incorporated outside the UK which are 100% owned by the Group and fully consolidated for accounting purposes.

Entity name	Activity	Regulatory treatment	Notes
Candlelight Acquisition LLC	BF	FC	(8)
Coutts & Co Ltd	BF	FC	(22)
Coutts & Co Trustees (Suisse) S.A.	BF	DE	(16)
Coutts General Partner (Cayman) V Ltd	BF	FC	(25)
Financial Asset Securities Corp.	BF	PC	(8)
Greenwich Capital Derivatives, Inc.	BF	PC	(8)
Morar ICC Insurance Ltd	BF	DE	(26)
NatWest Markets Group Holdings Corporation	BF	FC	(8)
NatWest Markets Securities Inc.	INV	FC	(8)
NatWest Markets Securities Japan Ltd	INV	FC	(24)
NWM Services India Private Ltd	SC	FC	(23)
R.B. Leasing BDA One Ltd	BF	FC	(4)

Entity name	Activity	Regulatory treatment	Notes
Random Properties Acquisition Corp. III	INV	DE	(8)
Random Properties Acquisition Corp. IV	INV	DE	(8)
RBS Acceptance Inc.	CI	FC	(8)
RBS Americas Property Corp.	SC	FC	(8)
RBS Assessoria Ltda	SC	FC	(29)
RBS Bank (Polska) S.A.	CI	FC	(33)
RBS Commercial Funding Inc.	BF	FC	(8)
RBS Employment (Guernsey) Ltd	SC	FC	(1)
RBS Equity Corporation	BF	FC	(9)
RBS Financial Products Inc.	BF	FC	(8)
RBS Holdings USA Inc.	BF	FC	(8)
RBS Netherlands Holdings B.V.	BF	FC	(21)

The following table details active related undertakings incorporated in the UK where the Group ownership is less than 100%.

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Arran Cards Funding plc	BF	FC	FC	0	(10)
Higher Broughton (GP) Ltd	BF	EAA	PC	41	(20)
Higher Broughton Partnership LP	BF	EAA	DE	41	(19)
Isobel AssetCo Ltd	BF	FC	FC	75	(12)
Isobel EquityCo Ltd	BF	FC	FC	75	(12)
Isobel HoldCo Ltd	BF	FC	FC	75	(12)

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Isobel Intermediate HoldCo Ltd	BF	FC	DE	75	(12)
Isobel Loan Capital Ltd	BF	FC	FC	75	(12)
Isobel Mezzanine Borrower Ltd	BF	FC	FC	75	(12)
Land Options (East) Ltd	BF	EAJV	DE	50	(5)
NatWest Markets Secured Funding (LM) Ltd	BF	FC	PC	20	(17)
RBS Sempra Commodities LLP	BF	FC	FC	51	(5)

The following table details active related undertakings incorporated outside the UK where the Group ownership is less than 100%.

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Cesium Structured Funding Ltd	BF	FC	FC	0	(13)
Lunar Funding VIII Ltd	BF	FC	DE	0	(14)
Sempra Energy Trading LLC	BF	FC	DE	51	(7)

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Thames Asset Global Securitization No.1 Inc.	BF	FC	DE	0	(3)
Tulip Asset Purchase Company B.V.	BF	FC	FC	0	(18)

The following table details active related undertakings that are not active (actively being dissolved).

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
Arran Residential Mortgages Funding 2010-1 plc	FC	FC	0	(10)
Arran Residential Mortgages Funding 2011-1 plc	FC	DE	0	(10)
Arran Residential Mortgages Funding 2011-2 plc	FC	DE	0	(10)
Aspire Oil Services Ltd	EAA	DE	27	(32)
Attlee Personal Loans Plc	FC	FC	0	(10)
Bevan Loan Interest Purchaser Plc	FC	FC	0	(10)
Coutts Group	FC	FC	100	(2)
Greenock Funding No 5 Plc	FC	DE	0	(10)
Heartlands (Central) Ltd	FC	DE	100	(5)
KUC (Public Houses) Ltd	FC	DE	100	(2)
Latam Directors Ltd	NC	FC	100	(27)
MSE Holdings Ltd	IA	DE	37	(15)
Mulcaster Street Nominees Ltd	FC	FC	100	(28)
Nevis Derivatives No. 3 LLP	FC	FC	100	(10)
RB Investments 2 Ltd	FC	FC	100	(6)
RB Investments 5 Ltd	FC	FC	100	(6)

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
RBDC Investments Ltd	FC	FC	100	(5)
RBS Argonaut Ltd	FC	PC	100	(5)
RBS CIF Trustee Ltd	FC	FC	100	(2)
RBS Sempra Products Ltd	FC	DE	51	(30)
RBS Special Opportunities General Partner (England) Ltd	FC	FC	100	(6)
RBS Special Opportunities General Partner (Scotland) II Ltd	FC	FC	100	(5)
RBS Special Opportunities General Partner (Scotland) Ltd	FC	FC	100	(5)
RBS Specialised Property Investments Ltd	FC	DE	100	(6)
RoboScot DevCap Ltd	FC	DE	100	(5)
RoboScot Ventures Ltd	FC	FC	100	(5)
Royal Bank Development Capital Ltd	FC	DE	100	(2)
Royal Bank Project Investments Ltd	FC	FC	100	(6)
West Register (Land) Ltd	FC	DE	100	(5)
West Register (Project Developments) Ltd	FC	DE	100	(5)
West Register (Residential Property Investments) Ltd	FC	DE	100	(6)

Notes on the accounts

37 Related undertakings continued

The following table details related undertakings that are dormant.

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
Buchanan Holdings Ltd	FC	FC	100	(2)
Glyns Nominees Ltd	FC	FC	100	(6)
Lombard Corporate Finance (10) Ltd	FC	FC	100	(31)
Marigold Nominees Ltd	FC	FC	100	(2)
N.C. Head Office Nominees Ltd	FC	FC	100	(5)
Project & Export Finance (Nominees) Ltd	FC	DE	100	(2)
R.B.S. Property (Greenock) Ltd	FC	DE	100	(5)
RBOS Nominees Ltd	FC	FC	100	(6)

The following table details the overseas branches of the Group.

Subsidiary	Geographic location
Coutts & Co Ltd	Hong Kong
NatWest Markets Securities Japan Ltd (Tokyo branch)	Japan

Key:	
BF	Banking and financial institution
CI	Credit institution
INV	Investment (shares or property) holding company
SC	Service company
TR	Trustee
OTH	Other
DE	Deconsolidated
FC	Full consolidation
PC	Pro-rata consolidation
EAA	Equity accounting – Associate
EAJV	Equity accounting – Joint venture
IA	Investment accounting
NC	Not consolidated

Notes:

	Registered addresses (UK unless stated otherwise)	Country of incorporation
(1)	1 Le Marchant Street, St. Peter Port, GY1 1LF	Guernsey
(2)	1 Princes Street, London, EC2R 8BP, England	UK
(3)	114 West 47th Street, New York, 10036	USA
(4)	22 Victoria Street, Hamilton, HM12	Bermuda
(5)	24/25 St Andrew Square, Edinburgh, EH2 1AF, Scotland	UK
(6)	250 Bishopsgate, London, EC2M 4AA, England	UK
(7)	251 Little Falls Drive, Wilmington, Delaware, DE 19808	USA
(8)	2711 Centerville Road, Suite 400, Wilmington, Delaware, DE 19808	USA
(9)	340 Madison Avenue, New York, 10173	USA
(10)	35 Great St Helen's, London, EC3A 6AP, England	UK
(11)	36 St Andrew Square, Edinburgh, EH2 2YB, Scotland	UK
(12)	40 Berkeley Square, London, W1J 5AL, England	UK
(13)	5 Harbourmaster Place, Dublin 1	RoI
(14)	Boundary Hall, Cricket Square, 171 Elgin Avenue, George Town, Grand Cayman, KY1-1104	Cayman Islands
(15)	c/o Gentoo Fund Services Ltd, Mill Court, La Charrotiere, St Peter Port, GY1 3GG	Guernsey
(16)	c/o Regus Rue du Rhône Sàrl, Geneva, CH-1204	Switzerland
(17)	c/o SFM Corporate Services Ltd, 35 Great St Helens, London, EC3A 6AP, England	UK
(18)	Claude Debussylaan 24, Amsterdam, 1082 MD	Netherlands
(19)	Cornwall Buildings, 45-51 Newhall Street, Birmingham, West Midlands, B3 3QR, England	UK
(20)	Floor 3, 1 St Ann Street, Manchester, M2 7LR, England	UK
(21)	Gustav Mahlerlaan 350, Amsterdam, 1082 ME	Netherlands
(22)	Lerchenstrasse 18, Zurich, CH 8022	Switzerland
(23)	Level 1, Tower A, Building No 10, Phase III, DLF Cyber City, Gurgaon	India
(24)	Level 54, Hopewell Centre, 183 Queen's Road East	Hong Kong
(25)	Maples Corporate Services Limited, P.O. Box 309, 121 South Church Street, George Town, Grand Cayman, KY1-1104	Cayman Islands
(26)	PO Box 384, The Albany, South Esplanade, St Peter Port, GY1 4NF	Guernsey
(27)	Quartermile Two, 2 Lister Square, Edinburgh, Midlothian, EH3 9GL, Scotland	UK
(28)	Royal Bank House, 71 Bath Street, St Helier, JE4 8PJ	Jersey
(29)	Rua Boa Vista, Sao Paulo, SP 01014-907	Brazil
(30)	Suite 1, 3rd Floor 11-12 St James's Square, London, SW1Y 4LB, England	UK
(31)	The Quadrangle, The Promenade, Cheltenham, GL50 1PX, England	UK
(32)	Union Plaza 6th Floor, 1 Union Wynd, Aberdeen, AB10 1DQ, Scotland	UK
(33)	Wisniowy Business Park, ul 1-go Sierpnia 8a, Warsaw 02-134	Poland

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
RBS Cards Securitisation Funding Ltd	FC	DE	100	(28)
RBS Retirement Savings Trustee Ltd	FC	FC	100	(2)
RBS Trustees Ltd	FC	FC	100	(5)
RBSSAF (11) Ltd	FC	FC	100	(31)
RBSSAF (4) Ltd	FC	FC	100	(31)
Sixty Seven Nominees Ltd	FC	FC	100	(2)
The Royal Bank of Scotland (1727) Ltd	FC	FC	100	(5)
Williams & Glyn's Bank Ltd	FC	FC	100	(2)

Subsidiary	Geographic location
NatWest Markets Plc	Hong Kong, Singapore, Germany, France, Greece, Turkey, UAE, Poland, Ireland and India

Risk Factors

Principal Risks and Uncertainties

Set out below are certain risk factors that could adversely affect the Group's future results, its financial condition and prospects and cause them to be materially different from what is forecast or expected and either directly or indirectly impact the value of its securities in issue. These risk factors are broadly categorised and should be read in conjunction with the forward looking statements section, the strategic report and the capital and risk management section of this annual report and should not be regarded as a complete and comprehensive statement of all potential risks and uncertainties facing the Group.

Financial resilience risk

The implementation of the UK ring-fencing regime has had a significant impact on the Bank and entails increased risks

Prior to the implementation of the UK ring-fencing regime, the Bank was the RBS Group's principal operating subsidiary. Following the various business transfers effected in 2018, predominantly from the Group to the ring-fenced entities in the RBS Group, the Bank is now the principal holding company for most of the RBS Group's operations outside the ring-fence (excluding RBS International and, currently, NatWest Markets N.V. ('NWM NV')). As a result, the Bank can no longer accept deposits from certain retail and small business customers in the EEA (and post-Brexit, in the EEA and the UK) and the remaining operations of the Group only comprise the NatWest Markets franchise serving UK and Western European corporate and institutional customers, providing them with trading, risk management and financing solutions. These business operations are subject to further potential changes as a result of the UK's departure from the European Union (see also, 'The RBS Group is seeking the requisite permissions to implement its plan for continuity of business impacted by the UK's departure from the EU') and the planned transfer of NWM NV into the Group later in 2019.

The implementation of ring-fencing has had a significant impact on the Bank with a reduction in its operational footprint, changes in Board composition, balance sheet composition, its cost:income and CET1 ratios and risk profile, and its funding strategy, capital requirements and credit ratings. Accordingly, the Bank has adapted its strategy and business model and adopted new processes and structures for, among other things, financial reporting, risk management and corporate governance and has also implemented a shared services model with the ring-fenced entities for certain other services, the execution of which is subject to various internal and external factors and risks (see also, 'The Group may not meet targets nor generate sustainable returns'). There can be no certainty that the Group will be a viable, competitive or profitable banking business.

The Group is reliant on access to the global capital markets to meet its funding requirements, both directly, and indirectly through its parent for the purchase of its internal MREL.

The Group's funding plan currently requires that in 2019 the Group issue £3-5 billion in senior unsecured funding in order to meet its near-term debt re-financing and funding requirements, based on its current and anticipated business activities, and such funding requirements necessitate the Group to diversify its existing funding sources. The Group is therefore reliant on frequent access to the global capital markets for funding, and on terms that are acceptable to it. Such access entails execution risk and could be impeded by a number of internal or external factors, including, those referred to below in 'The Group faces market risk as a result of increased political and economic risks and uncertainty in the UK and global markets', 'Uncertainties surrounding the UK's withdrawal from the European Union may adversely affect the Group' and 'Any reduction in the credit rating assigned to RBSG, any of its subsidiaries (including the Bank or other Group subsidiaries) or any of their respective debt securities could adversely affect the availability of funding for the Group, reduce the Group's liquidity position and increase the cost of funding'.

In addition, the Group receives capital and funding from the RBS Group. The Group is required to maintain a set quantum of internal MREL, set as a percentage of its RWAs, which comprises loss-absorbing senior funding and regulatory capital instruments internally issued up to its parent RBSG. These instruments must be compliant with the minimum requirements for own funds and eligible liabilities ('MREL') as set forth by the Bank of England. The Bank of England has identified single point-of-entry as the preferred resolution strategy for RBS Group. Therefore, only RBSG is able to externally issue MREL eligible securities to investors, the proceeds of which can then be downstreamed to meet the internal MREL issuance requirements of its operating entities, including the Bank, as required. As a result, the Group's future ability to meet its internal MREL requirements will be reliant on its level of RWAs and RBSG's ability to issue sufficient amounts of external MREL securities and downstream the proceeds, as required, to the Group. The Group currently holds adequate regulatory capital and CRR-compliant MREL which, as at 31 December 2018, totalled 34% of RWAs.

The inability of the Group to adequately access the global capital markets, to reduce its RWAs in line with assumptions in its funding plans, or to receive the downstreaming of internal MREL, may adversely affect the Group, such that the Group may not constitute a viable banking business and/or fail to meet its regulatory capital and/or MREL requirements.

The Group may not meet the prudential regulatory requirements for capital and liquidity, or manage its capital, liquidity or funding effectively which could trigger certain management actions or recovery options.

The Group is required by regulators in the UK, the EU and other jurisdictions in which it undertakes regulated activities to maintain adequate financial resources. Adequate capital also gives the Group financial flexibility in the face of turbulence and uncertainty in the global economy and specifically in its core UK and European markets.

As at 31 December 2018, the Bank's CET1 ratio was 15.6%. The Bank's target CET1 ratio is now approximately 15% (on an unconsolidated basis). This target CET1 ratio is based on the Bank's expected regulatory requirements, internal modelling and risk appetite, including under stress scenarios. The Bank's current capital strategy is based on the planned reduction of its RWAs through disposals, natural attrition and other capital management initiatives (including the payment of dividends to RBSG, the Bank's parent company).

Other factors that could influence the Bank's CET1 ratio include, amongst other things:

- a depletion of the Bank's capital resources through increased costs or liabilities, losses (which would in turn impact retained earnings), sustained periods of low or lower interest rates, reduced asset values resulting in write-downs, impairments, changes in accounting policy, accounting charges or foreign exchange movements;
- a change in the quantum of the Bank's RWAs, with an increase in RWAs leading to a reduction in the CET1 ratio (and increase in the amount of internal MREL required);
- changes in prudential regulatory requirements including the Bank's Total Capital Requirement set by the PRA, including Pillar 2 requirements and regulatory buffers, as well as any applicable scalars; or
- further losses (including as a result of extreme one-off incidents such as cyber, fraud or conduct issues) or a failure to meet profitability targets would deplete capital resources and place downward pressure on the CET1 ratio.

In addition to regulatory capital, the Bank is required to maintain a set quantum of internal MREL set as a percentage of its RWAs. See 'The Group is reliant on access to the global capital markets to meet its funding requirements, both directly, and indirectly, through its parent for the purchase of its internal MREL'.

If, under a stress scenario, the capital or leverage ratio falls outside of risk appetite, there are a range of recovery management

Risk Factors

actions (focussed on risk reduction and mitigation) that the Bank could take to manage its capital and leverage levels, which may or may not be sufficient to restore adequate capital and leverage levels.

Under the EU Bank Recovery and Resolution Framework ('BRRD'), as implemented in the UK, a breach of the Group's applicable capital or leverage requirements would trigger consideration of the Group's recovery plan, and in turn may prompt consideration of the RBS Group's recovery plan. The RBS Group may address a shortage of capital by taking action, or requiring the Group to take action, to reduce leverage exposure and/or RWAs via asset or business disposals. The RBS Group's (and the Bank's) regulator may also request that the Group carry out additional capital management actions. The Bank of England has identified single point-of-entry as the preferred resolution strategy for RBS Group. However, under certain conditions set forth in the BRRD, as the UK resolution authority, the Bank of England also has the power to 'bail-in' certain securities of the Group without further action at the RBS Group level.

Any capital management actions taken under a stress scenario may affect, among other things, the Group's product offering, credit ratings, ability to operate its businesses and pursue its current strategies and strategic opportunities as well as negatively impacting investor confidence and the value of the Group's securities. See also, 'The RBS Group (including the Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, among other actions, the write-down or conversion of the Group's Eligible Liabilities'.

The Group is required to access sources of liquidity and funding through deposits and wholesale funding, including debt capital markets and trading liabilities such as repurchase agreements. Due to the implementation of the UK ring-fencing regime the Group can no longer accept deposits from certain retail and small business customers in the EEA (and post-Brexit, in the EEA and the UK). As at 31 December 2018, the Group held £5.3 billion in deposits from corporate and institutional clients. The level of deposits and wholesale funding may fluctuate due to factors outside the Group's control, such as a loss of confidence (including in individual Group entities) and increasing competitive pressures for bank funding or the reduction or cessation of deposits and other funding by foreign counterparties, which could result in a significant outflow of deposits or reduction in wholesale funding within a short period of time. See also, 'The Group has significant exposure to counterparty and borrower risk'. An inability to grow, roll-over, or any material decrease in, the Group's deposits could, particularly if accompanied by one of the other factors described above, materially affect the Group's ability to satisfy its liquidity needs.

As at 31 December 2018, the Group reported a liquidity coverage ratio of 457%. If its liquidity position were to come under stress and if the Group is unable to raise funds through deposits or wholesale funding sources on acceptable terms or at all, its liquidity position could be adversely affected and it might be unable to meet deposit withdrawals on demand, buy back requests, to repay borrowings as they mature, to meet its obligations under committed financing facilities, to comply with regulatory funding requirements, to undertake certain capital and/or debt management activities, or to fund new loans, investments and businesses. The Group may need to liquidate unencumbered assets to meet its liabilities, including disposals of assets not previously identified for disposal to reduce its funding commitments. In a time of reduced liquidity, or market stress, the Group may be unable to sell some of its assets, or may need to sell assets at depressed prices, which in either case could negatively affect the Group's results.

As previously announced, as of 1 November 2018, the Bank ceased to be a party to the UK DoLSub, and the Group now manages liquidity risk, including through holding its own liquidity portfolio, on a stand-alone basis. It therefore has restricted access to liquidity or funding from other RBS Group entities. As a result, the Bank's liquidity position could be adversely affected, which may require unencumbered assets to be liquidated or may result in higher funding costs which may impact the Group's margins and profitability. As of 1 November 2018, the Bank has also ceased to be a party to the RBS Group Capital Support Deed, and now has its own separate Capital Support Deed, which facilitates capital support amongst the participating entities in the Group. The Bank's management of its own liquidity portfolio and the new structure of capital support are subject to operational and execution risk, as the Bank is now required to meet its own liquidity and capital requirements.

The Group may not meet targets nor generate sustainable returns.

As part of the RBS Group's strategy, the Group is engaged principally in providing financing, risk management and trading solutions to global customers across Europe, the USA and Asia and has set a number of financial, capital and operational targets for the Group including in respect of: cost:income ratios, cost reductions, CET1 ratio targets (for the Bank), leverage ratio targets (for the Bank), funding plans and requirements, reductions in RWAs and the timing thereof, employee engagement, diversity and inclusion as well as environmental, social and customer satisfaction targets.

The Group's ability to meet its targets and to successfully implement its strategy is subject to various internal and external factors and risks. These include, but are not limited to, market, regulatory, economic and political factors, developments relating to litigation,

governmental actions, investigations and regulatory matters, and operational risks and risks relating to the Group's business model and strategy (including emerging risks associated with environmental, social and governance issues). A number of factors may impact the Bank's ability to maintain its current CET1 ratio target, including impairments, limited organic capital generation or unanticipated increases in RWAs. In addition, the run-down of RWAs may be accompanied by the recognition of disposal losses which may be higher than anticipated.

The Group's ability to meet its cost:income ratio targets and the planned reductions in annual underlying costs may vary considerably from year to year. Furthermore, the focus on meeting cost reduction targets may result in limited investment in other areas which could affect the Group's long-term product offering or competitive position and its ability to meet its other targets, including those related to customer satisfaction.

The Group is currently loss-making. There is no certainty that the Group's strategy will be successfully executed, that the Group will meet its targets and expectations, or that the Group will be a viable, competitive or profitable banking business.

Any reduction in the credit rating assigned to RBSG, any of its subsidiaries (including the Bank or other Group subsidiaries) or any of their respective debt securities could adversely affect the availability of funding for the Group, reduce the Group's liquidity position and increase the cost of funding.

Rating agencies regularly review RBSG, the Bank and other RBS Group entity credit ratings, which could be negatively affected by a number of factors, including political and regulatory developments, changes in rating methodologies, changes in the relative size of the loss-absorbing buffers protecting bondholders and depositors, a challenging macroeconomic environment, the impact of Brexit, a potential second Scottish independence referendum, further reductions of the UK's sovereign credit rating, market uncertainty and the inability of the Group to produce profits.

Any reductions in the credit ratings of RBSG, the Bank or of certain other RBS Group entities, including, in particular, downgrades below investment grade, may affect the Group's access to money markets, reduce the size of its deposit base and trigger additional collateral or other requirements in derivatives contracts and other secured funding arrangements or the need to amend such arrangements, which could adversely affect the Group's (and, in particular, the Bank's) cost of funding and its access to capital markets and could limit the range of counterparties willing to enter into transactions with the Group (and, in particular, the Bank). This could in turn adversely

Risk Factors

impact its competitive position and threaten the prospects of the Group in the short to medium-term.

The Group operates in markets that are highly competitive, with increasing competitive pressures and technology disruption.

The market for international investment banking is highly competitive, and the Group expects such competition to continue or intensify in response to customer behaviour, technological changes, competitor behaviour, new entrants to the market, industry trends resulting in increased disaggregation or unbundling of financial services, and the impact of regulatory actions and other factors.

Increasingly many of the products and services offered by the Group are, and will become, technology intensive and the Group's ability to develop such services and comply with related regulatory changes has become increasingly important to retaining and growing the Group's client businesses across its geographical footprint. There can be no certainty that the Group's innovation strategy (which includes investment in its IT capability intended to improve its core infrastructure and client interface capabilities as well as investments and partnerships with third party technology providers) will be successful or that it will allow the Group to continue to grow such services in the future and certain of the Group's current or future competitors may be more successful in implementing innovative technologies for delivering products or services to their clients.

Furthermore, the Group's competitors may be better able to attract and retain clients and key employees and may have access to lower cost funding and/or be able to attract deposits or provide investment banking services on more favourable terms than the Group. Although the Group invests in new technologies and participates in industry and research led initiatives aimed at developing new technologies, such investments may be insufficient or ineffective, especially given the Group's focus on its cost savings targets, which may limit additional investment in areas such as financial innovation and therefore could affect the Group's offering of innovative products or technologies for delivering products or services to clients and its competitive position. The Group may also fail to identify future opportunities or derive benefits from disruptive technologies in the context of rapid technological innovation, changing customer behaviour and growing regulatory demands. Furthermore, the development of innovative products depends on the Group's ability to produce underlying high quality data, failing which its ability to offer innovative products may be compromised.

If the Group is unable to offer competitive, attractive and innovative products that are also profitable, it will lose market share, incur losses on some or all of its activities and lose opportunities for growth. In this context, the

Group is investing in the automation of certain solutions and interactions within its customer-facing businesses, including through artificial intelligence. Such initiatives may result in operational, reputational and conduct risks if the technology used is defective, or is not fully integrated into the Group's current solutions or does not deliver expected cost savings. The investment in automated processes will likely also result in increased short-term costs for the Group.

In addition, recent and future disposals and restructurings by the Group, cost-cutting measures, as well as employee remuneration constraints, may also have an impact on its ability to compete effectively and intensified competition from incumbents, challengers and new entrants in the Group's core markets could affect the Group's ability to provide satisfactory returns. Furthermore, continued consolidation in certain sectors of the financial services industry could result in the Group's remaining competitors gaining greater capital and other resources, including the ability to offer a broader range of products and services and geographic diversity, or the emergence of new competitors.

The Group may be adversely affected if the RBS Group fails to meet the requirements of regulatory stress tests.

The RBS Group is subject to annual stress tests by its regulator in the UK and is also subject to stress tests by European regulators with respect to RBSG, NWM N.V. and Ulster Bank Ireland DAC. Stress tests are designed to assess the resilience of banks to potential adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. If the stress tests reveal that a bank's existing regulatory capital buffers are not sufficient to absorb the impact of the stress, then it is possible that the bank will need to take action to strengthen its capital position.

Failure by the RBS Group to meet the quantitative and qualitative requirements of the stress tests carried out by its regulators in the UK and elsewhere may result in the RBS Group's regulators requiring the RBS Group to generate additional capital, reputational damage, increased supervision and/or regulatory sanctions and/or loss of investor confidence.

The Group has significant exposure to counterparty and borrower risk.

The Group has exposure to many different industries, customers and counterparties, and risks arising from actual or perceived changes in credit quality and the recoverability of monies due from borrowers and other counterparties are inherent in a wide range of the Group's businesses. These are particularly relevant for those businesses for which the concentration of client income is heavily weighted towards a specific geographic region, industry or client base. The Group is exposed to credit risk if a customer, borrower or counterparty defaults,

or under IFRS 9, suffers a sufficiently significant deterioration of credit quality under SICR ('significant increases in credit risk') rules such that it moves to Stage 2 for impairment calculation purposes. Credit risk may arise from a variety of business activities, including, but not limited to: extending credit to clients through various lending commitments; entering into swap or other derivative contracts under which counterparties have obligations to make payments to the Group (including un-collateralised derivatives); providing short or long-term funding that is secured by physical or financial collateral whose value may at times be insufficient to fully cover the loan repayment amount; posting margin and/or collateral and other commitments to clearing houses, clearing agencies, exchanges, banks, securities firms and other financial counterparties; and investing and trading in securities and loan pools, whereby the value of these assets may fluctuate based on realised or expected defaults on the underlying obligations or loans. See also, 'Capital and risk management — Credit Risk'. Any negative developments in the activities listed above may negatively impact the Group's clients and credit exposures, which may, in turn, impact the Group's profitability.

The credit quality of the Group's borrowers and other counterparties is impacted by prevailing economic and market conditions and by the legal and regulatory landscape in the UK and Europe in general, and any deterioration in such conditions or changes to legal or regulatory landscapes could worsen borrower and counterparty credit quality and consequently impact the Group's ability to enforce contractual security rights. See also, 'The Group faces market risk as a result of increased political and economic risks and uncertainty in the UK and global markets'.

Concerns about, or a default by, a financial institution could lead to significant liquidity problems and losses or defaults by other financial institutions, since the commercial and financial soundness of many financial institutions is closely related and inter-dependent as a result of credit, trading, clearing and other relationships among these financial institutions. Any perceived lack of creditworthiness of a counterparty may lead to market-wide liquidity problems and losses for the Group. This systemic risk may also adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms and exchanges with which the Group interacts on a daily basis. See also, 'The Group is reliant on access to the global capital markets to meet its funding requirements, both directly, and indirectly through its parent for the purchase of its internal MREL'.

As a result, borrower and counterparty credit quality may cause accelerated impairment charges under IFRS 9, increased repurchase demands, higher costs, additional write-downs and losses for the Group and an inability to engage in routine funding transactions.

Risk Factors

The Group could incur losses or be required to maintain higher levels of capital as a result of limitations or failure of various models.

Given the complexity of the Group's business, strategy and capital requirements, the Group relies on analytical models for a wide range of purposes, including to manage its business, assess the value of its assets and its risk exposure, as well as to anticipate capital and funding requirements (including to facilitate the RBS Group's mandated stress testing). In addition, the Group utilises models for valuations, credit approvals, calculation of loan impairment charges on an IFRS 9 basis, financial reporting and for financial crime and fraud risk management. The Group's models, and the parameters and assumptions on which they are based, are periodically reviewed and updated to maximise their accuracy.

Such models are inherently designed to be predictive in nature. Failure of these models, including due to errors in model design or inputs, to accurately reflect changes in the micro and macroeconomic environment in which the Group operates, to capture risks and exposures at the subsidiary level, to be updated in line with the Group's current business model or operations, or findings of deficiencies by the RBS Group (and in particular, the Group's) regulators (including as part of the RBS Group's mandated stress testing) may result in increased capital requirements or require management action. The Group may also face adverse consequences as a result of actions by management based on models that are poorly developed, implemented or used, models that are based on inaccurate or compromised data or as a result of the modelled outcome being misunderstood, or by such information being used for purposes for which it was not designed.

The Group's financial statements are sensitive to underlying accounting policies, judgements, estimates and assumptions.

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets, liabilities, income, expenses, exposures and RWAs. Due to the inherent uncertainty in making estimates (particularly those involving the use of complex models), future results may differ from those estimates. Estimates, judgements, assumptions and models take into account historical experience and other factors, including market practice and expectations of future events that are believed to be reasonable under the circumstances.

The accounting policies deemed critical to the Group's results and financial position, based upon materiality and significant judgements and estimates, which include loan impairment provisions, are set out in 'Critical accounting policies and key sources of estimation

uncertainty' on pages 71. New accounting standards and interpretations that have been issued by the International Accounting Standards Board but which have not yet been adopted by the Group are discussed in 'Accounting developments' on page 71.

Changes in accounting standards may materially impact Group's financial results.

Changes in accounting standards or guidance by accounting bodies or in the timing of their implementation, whether immediate or foreseeable, could result in the Group having to recognise additional liabilities on its balance sheet, or in further write-downs or impairments and could also significantly impact the financial results, condition and prospects of the Group.

In January 2018, a new accounting standard for financial instruments (IFRS 9) became effective, which introduced impairment based on expected credit losses, rather than the incurred loss model previously applied under IAS 39. The Group expects IFRS 9 to create earnings and capital volatility.

The Group's trading assets amounted to £75 billion as at 31 December 2018. The valuation of financial instruments, including derivatives, measured at fair value can be subjective, in particular where models are used which include unobservable inputs. Generally, to establish the fair value of these instruments, the Group relies on quoted market prices or, where the market for a financial instrument is not sufficiently credible, internal valuation models that utilise observable market data. In certain circumstances, the data for individual financial instruments or classes of financial instruments utilised by such valuation models may not be available or may become unavailable due to prevailing market conditions. In such circumstances, the Group's internal valuation models require the Group to make assumptions, judgements and estimates to establish fair value, which are complex and often relate to matters that are inherently uncertain. Any of these factors could require the Group to recognise fair value losses, which may have an adverse effect on the Group's income generation and financial position.

The Group will adopt IFRS 16 Leases with effect from 1 January 2019 as disclosed in the Accounting Policies. This is expected to increase Other assets by £21 million and Other liabilities by £27 million. While adoption of this standard has no effect on the Group's cash flows, it will impact financial ratios which may influence investors' perception of the financial condition of the Group.

The value or effectiveness of any credit protection that the Group has purchased depends on the value of the underlying assets and the financial condition of the insurers and counterparties.

The Group has some credit exposure arising from over-the-counter derivative contracts,

mainly credit default swaps (CDSs), and other credit derivatives, each of which are carried at fair value. The fair value of these CDSs, as well as the Group's exposure to the risk of default by the underlying counterparties, depends on the valuation and the perceived credit risk of the instrument against which protection has been bought. Many market counterparties have been adversely affected by their exposure to residential mortgage-linked and corporate credit products, whether synthetic or otherwise, and their actual and perceived creditworthiness may deteriorate rapidly. If the financial condition of these counterparties or their actual or perceived creditworthiness deteriorates, the Group may record further credit valuation adjustments on the credit protection bought from these counterparties under the CDSs. The Group also recognises any fluctuations in the fair value of other credit derivatives. Any such adjustments or fair value changes may have a negative impact on the Group's results.

The RBS Group (including the Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, among other actions, the write-down or conversion of the Group's Eligible Liabilities.

The Banking Act 2009, as amended ('Banking Act'), implements the BRRD in the UK and creates a special resolution regime ('SRR'). Under the SRR, HM Treasury, the Bank of England and the PRA and FCA (together 'Authorities') are granted substantial powers to resolve and stabilise UK-incorporated financial institutions. Five stabilisation options exist under the current SRR: (i) transfer of all of the business of a relevant entity or the shares of the relevant entity to a private sector purchaser; (ii) transfer of all or part of the business of the relevant entity to a 'bridge bank' wholly-owned by the Bank of England; (iii) transfer of part of the assets, rights or liabilities of the relevant entity to one or more asset management vehicles for management of the transferor's assets, rights or liabilities; (iv) the write-down, conversion, transfer, modification, or suspension of the relevant entity's equity, capital instruments and liabilities ('Eligible Liabilities'); and (v) temporary public ownership of the relevant entity. These tools may be applied to RBSG as the parent company or to the Group, as an affiliate, where certain conditions are met (such as, whether the firm is failing or likely to fail, or whether it is reasonably likely that action will be taken (outside of resolution) that will result in the firm no longer failing or being likely to fail). Moreover, the SRR provides for modified insolvency and administration procedures for relevant entities, and confers ancillary powers on the Authorities, including the power to modify or override certain contractual arrangements in certain circumstances. The Authorities are also empowered by order to amend the law for the purpose of enabling the powers under the SRR to be used effectively. Such orders may promulgate provisions with retrospective applicability.

Risk Factors

Under the Banking Act, the Authorities are generally required to have regard to specified objectives in exercising the powers provided for by the Banking Act. One of the objectives (which is required to be balanced as appropriate with the other specified objectives) refers to the protection and enhancement of the stability of the financial system of the UK. Moreover, the 'no creditor worse off' safeguard contained in the Banking Act may not apply in relation to an application of the separate write-down and conversion power relating to capital instruments under the Banking Act, in circumstances where a stabilisation power is not also used; holders of debt instruments which are subject to the power may, however, have ordinary shares transferred to or issued to them by way of compensation.

Uncertainty exists as to how the Authorities may exercise the powers granted to them under the Banking Act. In addition, the determination that ordinary shares, securities and other obligations issued by RBS Group (including the Group) may be subject to write-down, conversion or 'bail-in' (as applicable) is unpredictable and may depend on factors outside of the Group's control. Moreover, the relevant provisions of the Banking Act remain untested in practice. However, if the Group (or any other RBS Group entity) is at or is approaching the point of non-viability such that regulatory intervention is required, any exercise of the resolution regime powers by the Authorities may adversely affect holders of the Group's securities that fall within the scope of 'bail-in' powers. This may result in various actions being undertaken in relation to the Group and any securities of the Group, including the write-down of certain of the Group's Eligible Liabilities which would adversely affect the financial results, condition and prospects of the Group.

Operational and IT resilience risk **The Group is subject to increasingly sophisticated and frequent cyberattacks.**

The Group is experiencing continued cyberattacks across the entire Group, with an emerging trend of attacks against the Group's supply chain, re-enforcing the importance of due diligence and close working with the third parties on which the Group relies. The Group is reliant on technology, which is vulnerable to attacks, with cyberattacks increasing in terms of frequency, sophistication, impact and severity. As cyberattacks evolve and become more sophisticated, the Group will be required to invest additional resources to upgrade the security of its systems. In 2018, the Group was subjected to a small but increasing number of Distributed Denial of Service ('DDOS') attacks, which are a pervasive and significant threat to the global financial services industry. The Group fully mitigated the impact of these attacks whilst sustaining full availability of services for its customers. Hostile attempts are made by third parties to gain access to and introduce malware (including ransomware) into the Group's IT

systems, and to exploit vulnerabilities. The Group has information security controls in place, which are subject to review on a continuing basis, but there can be no assurance that such measures will prevent all DDOS attacks or other cyberattacks in the future. See also, 'The Group's operations are highly dependent on its IT systems'.

Any failure in the Group's cybersecurity policies, procedures or controls, may result in significant financial losses, major business disruption, inability to deliver customer services, or loss of data or other sensitive information (including as a result of an outage) and may cause associated reputational damage. Any of these factors could increase costs (including costs relating to notification of, or compensation for clients and credit monitoring), result in regulatory investigations or sanctions being imposed or may affect the Group's ability to retain and attract clients. Regulators in the UK, US and Europe continue to recognise cybersecurity as an increasing systemic risk to the financial sector and have highlighted the need for financial institutions to improve their monitoring and control of, and resilience (particularly of critical services) to cyberattacks, and to provide timely notification of them, as appropriate.

Additionally, parties may also fraudulently attempt to induce employees, customers, third party providers or other users who have access to the Group's systems to disclose sensitive information in order to gain access to the Group's data or that of the Group's clients or employees. Cybersecurity and information security events can derive from human error, fraud or malice on the part of the Group's employees or third parties, including third party providers, or may result from accidental technological failure.

In accordance with the General Data Protection Regulation ('GDPR'), the Group is required to ensure it timely implements appropriate and effective organisational and technological safeguards against unauthorised or unlawful access to data of the Group, its clients and its employees. In order to meet this requirement, the Group relies on the effectiveness of its internal policies, controls and procedures to protect the confidentiality, integrity and availability of information held on its IT systems, networks and devices as well as with third parties with whom the Group interacts and a failure to monitor and manage data in accordance with the GDPR requirements may result in financial losses, regulatory fines and investigations and associated reputational damage. In addition, whilst the Group takes appropriate measures to prevent, detect and minimise attacks, the Group's systems, and those of third party providers, are subject to frequent cyberattacks.

The Group expects greater regulatory engagement, supervision and enforcement in relation to its overall resilience to withstand IT

and related disruption, either through a cyberattack or some other disruptive event. However, due to the Group's reliance on technology and the increasing sophistication, frequency and impact of cyberattacks, it is likely that such attacks could have a material impact on the Group.

Operational risks are inherent in the Group's businesses.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, procedures, people or systems, or from external events, including legal risks. The Group operates in many countries, offering a diverse range of products and services supported by 3,200 employees; it therefore has complex and diverse operations. As a result, operational risks or losses can arise from a number of internal or external factors. These risks are also present when the Group relies on outside suppliers or vendors to provide services to it or its clients, as is increasingly the case as the Group implements new technologies, innovates and responds to regulatory and market changes.

Operational risks continue to be heightened as a result of the Group's current cost-reduction measures and conditions affecting the financial services industry generally (including Brexit and other geo-political developments) and in particular the legal and regulatory uncertainty resulting therefrom. This may place significant pressure on the Group's ability to maintain effective internal controls and governance frameworks. In particular, new governance frameworks have recently been put into place throughout the RBS Group for certain RBS Group entities (including entities within the Group), due to the implementation of the UK ring-fencing regime and the resulting legal entity structure. The Group is also dependent on the RBS Group for certain shared critical services. The effective management of operational risks is critical to meeting customer service expectations and retaining and attracting client business. Although the Group has implemented risk controls and loss mitigation actions, and significant resources and planning have been devoted to mitigate operational risk, there is uncertainty as to whether such actions will be effective in controlling each of the operational risks faced by the Group.

The Group's operations are highly dependent on its IT systems.

The Group's operations are highly dependent on the ability to process a very large number of transactions efficiently and accurately while complying with applicable laws and regulations. The proper functioning of the Group's payment systems, financial and sanctions controls, risk management, credit analysis and reporting, accounting, customer service and other IT systems, are critical to the Group's operations.

Individually or collectively, any critical system

Risk Factors

failure, prolonged loss of service availability or material breach of data security could cause serious damage to the Group's ability to provide services to its clients, which could result in significant compensation costs or regulatory sanctions (including fines resulting from regulatory investigations) or a breach of applicable regulations. In particular, failures or breaches resulting in the loss or publication of confidential customer data could cause long-term damage to the Group's reputation and could affect its regulatory approvals, competitive position, business and brands, which could undermine its ability to attract and retain clients. This risk is heightened as the Group continues to innovate and offer new digital solutions to its clients as a result of the trend towards online and digital product offerings.

In 2018, the Group upgraded its IT systems and technology and expects to continue to make considerable investments to further simplify, upgrade and improve its IT and technology capabilities (including migration to the Cloud) to make them more cost-effective, improve controls and procedures, strengthen cyber security, enhance digital services provided to its clients and improve the Group's competitive position. Should such investment and rationalisation initiatives fail to achieve the expected results or prove to be insufficient due to cost challenges or otherwise, this could negatively affect the Group's operations, its reputation and ability to retain or grow its client business or adversely impact its competitive position, thereby negatively impacting the Group's financial position.

The Group relies on attracting, retaining, developing and remunerating senior management and skilled personnel (such as market trading specialists), and is required to maintain good employee relations.

The Group's current and future success depends on its ability to attract, retain, develop and remunerate highly skilled and qualified personnel, including senior management, directors, market trading specialists and key employees, in a highly competitive labour market and under internal cost reduction pressures. This entails risk, particularly in light of heightened regulatory oversight of banks and the increasing scrutiny of, and (in some cases) restrictions placed upon, employee compensation arrangements, in particular those of banks in receipt of government support such as the RBS Group, which may have an adverse effect on the Group's ability to hire, retain and engage well-qualified employees. The market for skilled personnel is increasingly competitive, especially for technology-focussed roles, thereby raising the cost of hiring, training and retaining skilled personnel. In addition, certain economic, market and regulatory conditions and political developments (including Brexit)

may reduce the pool of candidates for key management and non-executive roles, including non-executive directors with the right skills, knowledge and experience, or increase the number of departures of existing employees.

Some of the Group's employees are represented by employee representative bodies, including trade unions. Engagement with its employees and such bodies is important to the Group in maintaining good employee relations. Any failure to do so could impact the Group's ability to operate its business effectively.

A failure in the Group's risk management framework could adversely affect the Group, including its ability to achieve its strategic objectives.

Risk management is an integral part of all of the Group's activities and includes the definition and monitoring of the Group's risk appetite and reporting on the Group's risk exposure and the potential impact thereof on the Group's financial condition. Financial risk management is highly dependent on the use and effectiveness of internal stress tests and models and ineffective risk management may arise from a wide variety of factors, including lack of transparency or incomplete risk reporting, unidentified conflicts or misaligned incentives, lack of accountability control and governance, lack of consistency in risk monitoring and management or insufficient challenges or assurance processes. Failure to manage risks effectively could adversely impact the Group's reputation or its relationship with its clients, shareholders or other stakeholders.

The Group's operations are inherently exposed to conduct risks. These include business decisions, actions or incentives that are not responsive to or aligned with the Group's client needs or do not reflect the Group's customer-focussed strategy, ineffective product management, unethical or inappropriate use of data, outsourcing of customer service and product delivery, the possibility of alleged mis-selling of financial products and mishandling of customer complaints. Some of these risks have materialised in the past and ineffective management and oversight of conduct risks may lead to further remediation and regulatory intervention or enforcement. The Group's businesses are also exposed to risks from employee misconduct including non-compliance with policies and regulations, negligence or fraud (including financial crimes), any of which could result in regulatory fines or sanctions and serious reputational or financial harm to the Group.

The Group is seeking to embed a strong risk culture across the organisation and has implemented policies and allocated new resources across all levels of the organisation to manage and mitigate conduct risk and expects to continue to invest in its risk management framework. However, such

efforts may not insulate the Group from future instances of misconduct and no assurance can be given that the Group's strategy and control framework will be effective. Any failure in the Group's risk management framework could negatively affect the Group and its financial condition through reputational and financial harm and may result in the inability to achieve its strategic objectives for its clients, employees and wider stakeholders.

The Group's operations are subject to inherent reputational risk.

Reputational risk relates to stakeholder and public perceptions of the Group arising from an actual or perceived failure to meet stakeholder expectations due to any events, behaviour, action or inaction by the Group, its employees or those with whom the Group is associated. This includes brand damage, which may be detrimental to the Group's business, including its ability to build or sustain business relationships with clients, and may cause low employee morale, regulatory censure or reduced access to, or an increase in the cost of, funding. Reputational risk may arise whenever there is a material lapse in standards of integrity, compliance, customer or operating efficiency and may adversely affect the Group's ability to attract and retain clients. In particular, the Group's ability to attract and retain clients may be adversely affected by, amongst others: negative public opinion resulting from the actual or perceived manner in which the Group or any other member of the RBS Group conducts or modifies its business activities and operations, media coverage (whether accurate or otherwise), employee misconduct, the Group's financial performance, IT systems failures or cyberattacks, the level of direct and indirect government support for RBSG, or the actual or perceived practices in the banking and financial industry in general, or a wide variety of other factors.

Modern technologies, in particular online social networks and other broadcast tools which facilitate communication with large audiences in short time frames and with minimal costs, may also significantly enhance and accelerate the impact of damaging information and allegations.

Although the Group has implemented a Reputational Risk Policy to improve the identification, assessment and management of customers and clients, transactions, products and issues which represent a reputational risk, the Group cannot be certain that it will be successful in avoiding damage to its business from reputational risk.

Economic and political risk
The Group faces market risk as a result of increased political and economic risks and uncertainty in the UK and global markets.
In the UK, significant economic and political uncertainty surrounds the terms of and timing of Brexit. (See also, 'Uncertainties surrounding the UK's withdrawal from the European Union may adversely affect the

Risk Factors

Group'). In addition, were there to be a change of UK Government as a result of a general election, the Group may face new risks as a result of a change in government policy, including more direct intervention by the UK Government in financial markets, the regulation and ownership of public companies and the extent to which the government exercises its rights as a shareholder of the RBS Group. This could affect, in particular, the structure, strategy and operations of the RBS Group (including the Group) and may negatively impact the Group's operational performance and financial results.

The RBS Group faces additional political uncertainty as to how the Scottish parliamentary process (including, as a result of any second Scottish independence referendum) may impact the Group. RBSG and a number of other RBS Group entities (including the Bank) are

headquartered and incorporated in Scotland. Any changes to Scotland's relationship with the UK or the EU (as an indirect result of Brexit or other developments) would impact the environment in which the RBS Group and its subsidiaries operate, and may require further changes to the RBS Group (including the Group's structure), independently or in conjunction with other mandatory or strategic structural and organisational changes which could adversely impact the Group.

Actual or perceived difficult global economic conditions can create challenging economic and market conditions and a difficult operating environment for the Group's businesses and its clients and counterparties, thereby affecting its financial performance.

The value of the Group's financial instruments may be materially affected by market risk, including as a result of market fluctuations. Market volatility, illiquid market conditions and disruptions in the credit markets may make it extremely difficult to value certain of the Group's financial instruments, particularly during periods of market displacement which could cause a decline in the value of the Group's financial instruments, which may have an adverse effect on the Group's results of operations in future periods, or inaccurate carrying values for certain financial instruments. Similarly, the Group trades a considerable amount of financial instruments (including derivatives) and volatile market conditions could result in a significant decline in the Group's net trading income or result in a trading loss.

In addition, financial markets are susceptible to severe events evidenced by rapid depreciation in asset values, which may be accompanied by a reduction in asset liquidity. Under these extreme conditions, hedging and other risk management strategies may not be as effective at mitigating trading losses as they would be under more normal market conditions. Moreover, under these conditions, market participants are particularly exposed to

trading strategies employed by many market participants simultaneously and on a large scale, increasing the Group's counterparty risk. The Group's risk management and monitoring processes seek to quantify and mitigate the Group's exposure to more extreme market moves. However, severe market events have historically been difficult to predict and the Group could realise significant losses if extreme market events were to occur.

The outlook for the global economy over the medium-term remains uncertain due to a number of factors including: trade barriers and the increased possibility of trade wars, widespread political instability, an extended period of low inflation and low interest rates, and global regional variations in the impact and responses to these factors. Such conditions could be worsened by a number of factors including political uncertainty or macro-economic deterioration in the Eurozone, China or the US, increased instability in the global financial system and concerns relating to further financial shocks or contagion (for example, due to economic concerns in emerging markets), market volatility or fluctuations in the value of the pound sterling, new or extended economic sanctions, volatility in commodity prices or concerns regarding sovereign debt. This may be compounded by the ageing demographics of the populations in the markets that the Group serves, or rapid change to the economic environment due to the adoption of technology and artificial intelligence. Any of the above developments could impact the Group directly (for example, as a result of credit losses) or indirectly (for example, by impacting global economic growth and financial markets and the Group's clients and their banking needs).

In addition, the Group is exposed to risks arising out of geopolitical events or political developments, such as trade barriers, exchange controls, sanctions and other measures taken by sovereign governments that may hinder economic or financial activity levels. Furthermore, unfavourable political, military or diplomatic events, including secession movements or the exit of other member states from the EU, armed conflict, pandemics and widespread public health crises, state and privately sponsored cyber and terrorist acts or threats, and the responses to them by governments and markets, could negatively affect the business and performance of the Group.

Uncertainties surrounding the UK's withdrawal from the European Union may adversely affect the Group.

Following the EU Referendum in June 2016, and pursuant to the exit process triggered under Article 50 of the Treaty on European Union in March 2017, the UK is scheduled to leave the EU on 29 March 2019. The terms of a Brexit withdrawal agreement negotiated by the UK Government were decisively voted against by Parliament on 15 January 2019.

The UK Government and Parliament are currently actively engaged in seeking to determine the terms of this departure, including any transition period, and the resulting economic, trading and legal relationships with both the EU and other counterparties currently remain unclear and subject to significant uncertainty.

As it currently stands, EU membership and all associated treaties will cease to apply at 23:00 on 29 March 2019, unless some form of transitional arrangement encompassing those associated treaties is agreed or there is unanimous agreement amongst the UK, other EU member states and the European Commission to extend the negotiation period.

The direct and indirect effects of the UK's exit from the EU and the European Economic Area ('EEA') are expected to affect many aspects of the Group's business and operating environment, including as described elsewhere in these risk factors, and may be material and/or cause a near-term impact on impairments. See also 'The Group faces increased political and economic risks and uncertainty in the UK and global markets'.

The longer term effects of Brexit on the RBS Group's operating environment are difficult to predict, and are subject to wider global macro-economic trends and events, but may significantly impact the Group and its customers and counterparties who are themselves dependent on trading with the EU or personnel from the EU and may result in, or be exacerbated by, periodic financial volatility and slower economic growth, in the UK in particular, but also in Republic of Ireland, Europe and potentially the global economy.

Significant uncertainty exists as to the respective legal and regulatory arrangements under which the Group and its subsidiaries will operate when the UK is no longer a member of the EU (see 'The RBS Group is in the process of seeking requisite permissions to implement its plans for continuity of business impacted by the UK's departure from the EU'). The legal and political uncertainty and any actions taken as a result of this uncertainty, as well as new or amended rules, could have a significant impact on the Group's operations or legal entity structure, including attendant restructuring costs, level of impairments, capital requirements, regulatory environment and tax implications and as a result may adversely impact the Group's profitability, competitive position, viability, business model and product offering.

The RBS Group is seeking the requisite permissions to implement its plans for continuity of business impacted by the UK's departure from the EU.

The RBS Group is implementing plans

Risk Factors

designed to continue its ability to clear euro payments and minimise the impact on the Group's ability to serve non-UK EEA customers in the event that there is an immediate loss of access to the European Single Market on 29 March 2019 (or any alternative date) with no alternative arrangement for continuation of such activities under current rules (also known as 'Hard Brexit'). These plans involve significant changes to the business model and operations of the Bank and the NatWest Markets franchise.

To ensure continued ability to clear Euro denominated payments, the RBS Group is finalising a third-country licence for the Frankfurt branch of National Westminster Bank Plc ('NWB') with the German regulator. In addition, the RBS Group is working to satisfy the conditions of the Deutsche Bundesbank (DBB) for, access to TARGET2 clearing and settlement mechanisms. Satisfying these DBB conditions, which include a country legal opinion, and accessing SEPA, Euro 1 and TARGET2 will allow the RBS Group and the Bank (through the NWB Frankfurt branch) to continue to clear cross-border payments in euros. The capacity to process these euro payments is a fundamental requirement for the daily operations and customers of all RBS Group franchises, including NatWest Markets. The value of such payments is typically in excess of €50 billion in any one day with more than 300,000 transactions. This capacity is also critical for management of the RBS Group's euro-denominated central bank cash balances of around €23 billion. The Bank will use the NWB Frankfurt branch to clear its euro payments and has also applied for a third country license to maintain liquidity management and product settlement arrangements.

A draft license has recently been issued for NWB Frankfurt branch which the Group intends to finalise imminently. Once in place, the third country licence branch approvals would each become effective when the UK leaves the EU and the current passporting arrangements cease to apply. The RBS Group expects to have received the requisite third country licenses and access to SEPA, Euro 1 and TARGET2 ahead of the UK's departure from the EU. However, given the quantum of affected payments and lack of short term contingency arrangements, in the event that such euro clearing capabilities were not in place in time for a Hard Brexit or as required in the future, it could have a material impact on the RBS Group and the Group and its customers.

Additionally, to continue serving most of the RBS Group's EEA customers, the RBS Group has repurposed the banking licence of its

Dutch subsidiary, NatWest Markets N.V. ('NWM NV'). As announced on 6 December 2018, the RBS Group has requested court permission for a FSMA transfer scheme to replicate the master trade documentation for NWM Plc's non-UK EEA customers and to transfer certain existing transactions from NWM Plc to NWM NV. Other transactions are expected to be transferred to NWM NV during 2019 (for example, certain transactions with Corporate and Sovereign customers and larger EEA customers from NWM Plc, and certain Western European corporate business from National Westminster Bank Plc). The volume and pace of business transfers to NWM NV will depend on the terms and circumstances of the UK's exit from the EU, as well as the specific contractual terms of the affected products. NWM NV is expected to become a subsidiary of NWM Plc in 2019 but there is significant uncertainty as to the size and shape of NWM NV due to continued Brexit uncertainty.

These changes to the Group's operating model are costly and require further changes to its business operations and customer engagement. The regulatory permissions from the Dutch and German authorities will be conditional in nature and will require on-going compliance with certain conditions, including maintaining minimum capital level and deposit balances as well as a defined local physical presence going forward; such conditions may be subject to change in the future. Maintaining these permissions and the Group and the RBS Group's access to the euro payment infrastructure will be fundamental to its business going forward and further changes to the Group's business operations may be required.

The Group expects to face significant risks in connection with climate change and the transition to a low carbon economy.

The risks associated with climate change are subject to rapidly increasing prudential and regulatory, political and societal focus, both in the UK and internationally. Embedding climate risk into the Group's risk framework in line with expected regulatory expectations, and adapting the Group's operation and business strategy to address both the risks of climate change and the transition to a low carbon economy are likely to have a significant impact on the Group.

Multilateral and UK Government undertakings to limit increases in carbon emissions in the near and medium term will require widespread levels of adjustment across all sectors of the economy, with some sectors such as property, energy, infrastructure (including transport) and agriculture likely to be particularly impacted. The nature and timing of the far-reaching commercial, technological and regulatory changes that this transition will entail are currently uncertain but the impact of such changes do not occur in an orderly or timely manner or are not effective in reducing

emissions sufficiently. Furthermore, the nature and timing of the manifestation of the physical risks of climate change (which include more extreme specific weather events such as flooding and heat waves and longer term shifts in climate) are also uncertain, and their impact on the economy is predicted to be more acute if carbon emissions are not reduced on a timely basis or to the requisite extent. The potential impact on the economy includes, but is not limited to, lower GDP growth, significant changes in asset prices and profitability of industries, higher unemployment and the prevailing level of interest rates.

UK and international regulators are actively seeking to develop new and existing regulations that are directly and indirectly focussed on climate change and the associated financial risks. Such new regulations are being developed in parallel with an increasing market focus on the risks associated with climate change. In October 2018, the Group's prudential regulator, the PRA published a draft supervisory standard which sets forth an expectation that regulated entities adopt a Board-level strategic approach to managing and mitigating the financial risks of climate change and embed the management of them into their governance frameworks, subject to existing prudential regulatory supervisory tools (including stress testing and individual and systemic capital requirements). Climate risk is also subject to various legislative actions and proposals by, among others, the European Commission's Sustainable Finance initiative that focuses on incorporating climate risk into its financial policy frameworks, including proposals (e.g., through amendments to MiFID II) for institutional investors (including pension funds) to consider and disclose climate risk criteria as part of their investment decision, and also proposals to consider changes to RWA methodologies. Furthermore, credit ratings agencies are increasingly taking into account environmental, social and governance ('ESG') factors, including climate risk, as part of the credit ratings analysis, as are investors in their investment decisions.

If the Group does not adequately embed climate risk into its risk framework to appropriately measure, manage and disclose the various financial and physical risks it faces associated with climate change, or fails to adapt its strategy and business model to the changing regulatory requirements and market expectations on a timely basis, it may have a material and adverse impact on the Group's level of business growth, its competitiveness, profitability, prudential capital requirements, credit ratings, cost of funding, results of operation and financial condition.

Continued low interest rates have affected and will continue to affect the Group's business and results.

Interest rate risk exists for the Group, as monetary policy has been accommodative in recent years, including as a result of certain

Risk Factors

policies implemented by the Bank of England and HM Treasury such as the Term Funding Scheme, which have helped to support demand at a time of pronounced fiscal tightening and balance sheet repair. However, there remains considerable uncertainty as to the direction of interest rates and pace of change, as set by the Bank of England and other major central banks. Continued sustained low or negative interest rates could adversely affect the Group's profitability and prospects. In addition, a continued period of low interest rates and flat yield curves has affected and may continue to affect the interest rate margin realised between lending and borrowing costs.

Conversely, while increases in interest rates may support Group income, sharp increases in interest rates could lead to generally weaker than expected growth, or even contracting GDP, reduced business confidence, higher levels of unemployment or underemployment and adverse changes to levels of inflation.

Changes in foreign currency exchange rates may affect the Group's results and financial position.

Following changes to the RBS Group's structure as a result of implementation of the UK ring-fencing regime, the Group has become the markets business for the RBS Group, and is engaged principally in providing financing, risk management and trading solutions to global customers across Europe, the USA and Asia. The Group is required to issue instruments in foreign currencies that assist in meeting the Group's minimum requirements for own funds and eligible liabilities ('MREL'). In its day-to-day operations, the Group maintains policies and procedures designed to manage the impact of exposures to fluctuations in currency rates. Nevertheless, changes in currency rates, particularly in the sterling-US dollar and euro-sterling exchange rates, can adversely affect the value of assets, liabilities (including the total amount of MREL eligible instruments), income, RWAs, capital base and expenses and the reported earnings of the Bank's UK and non-UK subsidiaries and may affect the Group's reported consolidated financial condition, capital ratios or its income from foreign exchange dealing.

Decisions of major central banks (including by the Bank of England, the ECB and the US Federal Reserve) and political or market events (including in respect of Brexit), which are outside of the Group's control, may lead to sharp and sudden variations in foreign exchange rates.

HM Treasury (or UKGI on its behalf) could exercise a significant degree of influence over the RBS Group.

In its November 2018 Autumn Budget, the UK Government announced its intention to continue the process of privatisation of RBSG and to carry out a programme of sales of RBSG ordinary shares with the objective of selling all of its remaining shares in RBSG by

2023-2024. On 5 June 2018, the UK Government (via HM Treasury and UK Government Investments Limited ('UKGI')) disposed of approximately 7.7% of its stake in RBSG. As of 31 December 2018, the UK Government held 62.3% of the issued ordinary share capital of RBSG. There can be no certainty as to the continuation of the sell-down process or the timing or extent of such sell-downs.

UKGI manages HM Treasury's shareholder relationship with the RBSG and, although HM Treasury has indicated that it intends to respect the commercial decisions of the RBS Group and that the RBS Group entities (including the Group) will continue to have its own independent board of directors and management team determining their own strategy, its position as a majority shareholder (and UKGI's position as manager of this shareholding) means that HM Treasury

or UKGI could exercise a significant degree of influence over, among other things, the election of directors and appointment of senior management, the RBS Group's (including the Group's) capital strategy, dividend policy, remuneration policy or the conduct of the RBS Group's (including the Group's) operations, and HM Treasury's approach depends on government policy, which could change, including as a result of a general election. The exertion of such influence over RBS Group could in turn have an adverse effect on the governance or business strategy of the Group.

Legal, regulatory and conduct risk The Group's businesses are subject to substantial regulation and oversight, which are constantly evolving and may adversely affect the Group.

The Group is subject to extensive laws, regulations, corporate governance practice and disclosure requirements, administrative actions and policies in each jurisdiction in which it operates. Many of these have been introduced or amended recently and are subject to further material changes, which may increase compliance and conduct risks. The Group expects government and regulatory intervention in the financial services industry to remain high for the foreseeable future.

In recent years, regulators and governments have focussed on reforming the prudential regulation of the financial services industry and the manner in which the business of financial services is conducted. Among others, measures have included: enhanced capital, liquidity and funding requirements, implementation of the UK ring-fencing regime, implementation and strengthening of the recovery and resolution framework applicable to financial institutions in the UK, the EU and the US, financial industry reforms (including in respect of MiFID II), enhanced data privacy and IT resilience requirements, enhanced regulations in respect of the provision of 'investment services and activities', enhanced regulations in respect of the provision of

'investment services and activities', and increased regulatory focus in certain areas, including conduct, consumer protection regimes, anti-money laundering, anti-bribery, anti-tax evasion, payment systems, sanctions and anti-terrorism laws and regulations. This has resulted in the Group facing greater regulation and scrutiny in the UK, the US and other countries in which it operates.

In addition, there is significant oversight by competition authorities of the markets which the Group operates in. The competitive landscape for banks and other financial institutions in the UK, the rest of Europe and the US is rapidly changing. Recent regulatory and legal changes have and may continue to result in new market participants and changed competitive dynamics in certain key areas.

Recent regulatory changes, proposed or future developments and heightened levels of public and regulatory scrutiny in the UK,

Europe and the US have resulted in increased capital, funding and liquidity requirements, changes in the competitive landscape, changes in other regulatory requirements and increased operating costs, and have impacted, and will continue to impact, product offerings and business models. In particular, the RBS Group is required to comply with regulatory requirements in respect of the implementation of the UK ring-fencing regime and to ensure operational continuity in resolution; the steps required to ensure such compliance entail significant costs, and also impose significant operational, legal and execution risk. Serious consequences could arise should the RBS Group be found to be non-compliant with such regulatory requirements. Such changes may also result in an increased number of regulatory investigations and proceedings and have increased the risks relating to the Group's ability to comply with the applicable body of rules and regulations in the manner and within the time frames required.

Any of these developments (including any failure to comply with new rules and regulations) could have a significant impact on the Group's authorisations and licenses, the products and services that the Group may offer, its reputation and the value of its assets, the Group's operations or legal entity structure, and the manner in which the Group conducts its business. Areas in which, and examples of where, governmental policies, regulatory and accounting changes and increased public and regulatory scrutiny could have an adverse impact (some of which could be material) on the Group include, but are not limited to, those set out above as well as the following:

- general changes in government, central bank, regulatory or competition policy, or changes in regulatory regimes that may influence investor decisions in the markets in which the Group operates;

Risk Factors

- amendments to the framework or requirements relating to the quality and quantity of regulatory capital to be held by the Group as well as liquidity and leverage requirements, either on a solo, consolidated or subgroup level;
- changes to the design and implementation of national or supranational mandated recovery, resolution or insolvency regimes or the implementation of additional or conflicting loss-absorption requirements, including those mandated under UK rules, the BRRD, MREL or by the Financial Stability Board's ('FSB') recommendations on total loss-absorbing capacity ('TLAC');
- rules and regulations relating to, and enforcement of, anti-corruption, anti-bribery, anti-money laundering, anti-terrorism, sanctions, anti-tax evasion or other similar regimes;
- the imposition of additional restrictions on the Group's ability to compensate its senior management and other employees and increased responsibility and liability rules applicable to senior and key employees;
- rules relating to foreign ownership, expropriation, nationalisation and confiscation of assets;
- changes to corporate practice and disclosure governance requirements, senior manager responsibility, corporate structures and conduct of business rules;
- financial market infrastructure reforms establishing new rules applying to investment services, short selling, market abuse, derivatives markets and investment funds;
- new or increased regulations relating to customer data and privacy protection as well as IT controls and resilience, including the GDPR;
- the introduction of, and changes to, taxes, levies or fees applicable to the Group's operations, such as the imposition of a financial transaction tax, changes in the scope and administration of the Bank Levy, changes in tax rates, increases in the bank corporation tax surcharge in the UK, restrictions on the tax deductibility of interest payments or further restrictions imposed on the treatment of carry-forward tax losses that reduce the value of deferred tax assets and require increased payments of tax;
- laws and regulations in respect of climate change and sustainable finance (including ESG) considerations; and
- other requirements or policies affecting the Group and its profitability or product offering, including through the imposition of increased compliance obligations or obligations which may lead to restrictions on business growth, product offerings, or pricing.

Changes in laws, rules or regulations, or in their interpretation or enforcement, or the implementation of new laws, rules or regulations, including contradictory or conflicting laws, rules or regulations by key

regulators or policymakers in different jurisdictions, or failure by the Group to comply with such laws, rules and regulations, may adversely affect the Group's business and results. In addition, uncertainty and insufficient international regulatory coordination as enhanced supervisory standards are developed and implemented may adversely affect the Group's ability to engage in effective business, capital and risk management planning.

The Group is subject to a number of legal, regulatory and governmental actions and investigations as well as associated remedial undertakings, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on the Group.

The Group's operations are diverse and complex and it operates in legal and regulatory environments that expose it to potentially significant legal proceedings, and civil and criminal regulatory and governmental actions. The Group has settled a number of legal and regulatory actions over the past several years but continues to be, and may in the future be, involved in such actions in the US, the UK, Europe and other jurisdictions.

The Group is subject to a number of ongoing reviews, investigations and proceedings (both formal and informal) by governmental law enforcement and other agencies and litigation proceedings, relating to, among other matters, the offering of securities, conduct in the foreign exchange market, the setting of benchmark rates such as LIBOR and related derivatives trading, the issuance, underwriting, and sales and trading of fixed-income securities (including government securities), product mis-selling, customer mistreatment, anti-money laundering, antitrust and various other compliance issues. See also, 'Litigation, investigations and reviews' of Note 27 on the consolidated accounts on pages 113 to 116 for details of these matters. Legal and regulatory actions are subject to many uncertainties, and their outcomes, including the timing, amount of fines or settlements or the form of any settlements, which may be material and in excess of any related provisions, are often difficult to predict, particularly in the early stages of a case or investigation, and the Group's expectations for resolution may change.

Adverse outcomes or resolution of current or future legal or regulatory actions and associated remedial undertakings could result in restrictions or limitations on the Group's operations, and could adversely impact the Group's capital position or its ability to meet regulatory capital adequacy requirements. Failure to comply with undertakings made by the Group to its regulators may result in additional measures or penalties being taken against the Group.

The Group may not effectively manage the transition of LIBOR and other IBOR rates to alternative risk free rates.

UK and international regulators are driving a transition from the use of interbank offer rates (IBOR's), including LIBOR, to alternative risk free rates (RFRs). In the UK, the FCA has asserted that they will not compel LIBOR

submissions beyond 2021, thereby jeopardising its continued availability, and have strongly urged market participants to transition to RFRs, as has the CFTC and other regulators in the United States. The Group has significant exposure to IBORs primarily on its derivatives and legacy securities. Until there is market acceptance on the form of alternative RFRs for different products, the legal mechanisms to effect transition cannot be confirmed, and the impact cannot be determined nor any associated costs accounted for. The transition and uncertainties around the timing and manner of transition to RFRs represent a number of risks for the Group, its clients and the financial services industry more widely. These include risks related to: legal risks (as changes may be required to documentation for new or existing transactions); financial risks (which may arise from any changes in valuation of financial instruments linked to benchmark rates and may impact the Group's cost of funds and its risk management related financial models); pricing risks (such as changes to benchmark rates could impact pricing mechanisms on certain instruments); operational risks (due to the potential requirement to adapt IT systems, trade reporting infrastructure and operational processes); and conduct risks (which may relate to communication regarding the potential impact on customers, and engagement with customers during the transition period).

It is therefore currently difficult to determine to what extent the changes will affect the Group, or the costs of implementing any relevant remedial action. Uncertainty as to the nature of such potential changes, alternative reference rates or other reforms and as to the continuation of LIBOR or EURIBOR may adversely affect financial instruments using LIBOR or EURIBOR as benchmarks. The implementation of any alternative RFRs may be impossible or impracticable under the existing terms of such financial instruments and could have an adverse effect on the value of, return on and trading market for such financial instruments.

Changes in tax legislation or failure to generate future taxable profits may impact the recoverability of certain deferred tax assets recognised by the Group.

In accordance with IFRS, the Group has recognised deferred tax assets on losses available to relieve future profits from tax only to the extent it is probable that they will be recovered. The deferred tax assets are quantified on the basis of current tax legislation and accounting standards and are subject to change in respect of the future rates of tax or the rules for computing taxable profits and offsetting allowable losses.

In addition, the Group's interpretation or application of relevant tax laws may differ from those of the relevant tax authorities and provisions are made for potential tax liabilities that may arise on the basis of the amounts expected to be paid to tax authorities. The amounts ultimately paid may differ materially from the amounts provided depending on the ultimate resolution of such matters.

Forward-looking statements

Cautionary statement regarding forward-looking statements

Certain sections in this document contain 'forward-looking statements' as that term is defined in the United States Private Securities Litigation Reform Act of 1995, such as statements that include the words 'expect', 'estimate', 'project', 'anticipate', 'commit', 'believe', 'should', 'intend', 'plan', 'could', 'probability', 'risk', 'Value-at-Risk (VaR)', 'target', 'goal', 'objective', 'may', 'endeavour', 'outlook', 'optimistic', 'prospects' and similar expressions or variations on these expressions.

In particular, this document includes forward-looking statements relating, but not limited to: future profitability and performance, including financial performance targets such as return on tangible equity; cost savings and targets, including cost:income ratios; litigation and government and regulatory investigations, including the timing and financial and other impacts thereof; the continuation of the Group's balance sheet reduction programme, including the reduction of risk-weighted assets (RWAs) and the timing thereof; capital and strategic plans and targets; capital, liquidity and leverage ratios and requirements, including CET1 Ratio, RWA equivalents (RWAE), Pillar 2 and other regulatory buffer requirements, minimum requirement for own funds and eligible liabilities, and other funding plans; funding and credit risk profile; capitalisation; portfolios; net interest margin; customer loan and income growth; the level and extent of future impairments and write-downs, including with respect to restructuring and remediation costs and charges; and the Group's exposure to political risk, economic risk, climate change risk, operational risk, conduct risk, cyber and IT risk and credit rating risk and to various types of market risks, including interest rate risk, foreign exchange rate risk and commodity and equity price risk; customer experience including our Net Promoter Score (NPS); employee engagement and gender balance in leadership positions.

Limitations inherent to forward-looking statements

These statements are based on current plans, estimates, targets and projections, and are subject to significant inherent risks, uncertainties and other factors, both external and relating to the RBS Group and the Group's strategy or operations, which may result in the Group being unable to achieve the current targets, predictions, expectations and other anticipated outcomes expressed or implied by such forward-looking statements. In addition, certain of these disclosures are dependent on choices relying on key model characteristics and assumptions and are subject to various limitations, including assumptions and estimates made by management. By their nature, certain of these disclosures are only estimates and, as a result, actual future gains and losses could differ materially from those that have been estimated. Accordingly, undue reliance should not be placed on these statements. Forward-looking statements speak only as of the date we make them and we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Group's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Important factors that could affect the actual outcome of the forward-looking statements

We caution you that a large number of important factors could adversely affect our results or our ability to implement our strategy, cause us to fail to meet our targets, predictions, expectations and other anticipated outcomes or affect the accuracy of forward-looking statements we describe in this document including in the risk factors set out in the Group's 2018 Annual Report and Accounts and other risk factors and uncertainties discussed in this document.

These include the significant risks presented by: financial resilience risk (including in respect of: the implementation of the UK ring-fencing regime and its impact on the Bank; the Group's reliance on access to global capital markets to meet its funding commitments; the ability of the Group to meet prudential regulatory requirements for capital and liquidity and to manage its capital, liquidity and funding effectively; the Group's ability to meet targets and generate sustainable returns; changes in the credit ratings of RBSG, any of its subsidiaries or any of its respective debt securities; the highly competitive markets in which the Group operates; the RBS Group's ability to meet requirements of regulatory stress tests; deteriorations in borrower and counterparty credit quality; possible losses or the requirement to maintain higher levels of capital as a result of limitations or failure of various models; sensitivity of the Group's financial statements to underlying accounting policies, judgements, assumptions and estimates; and changes in applicable accounting policies or rules; the value and effectiveness of any credit protection purchased by the Group; and the application of UK statutory stabilisation or resolution powers), operational and IT resilience risk (including in respect of: the Group being subject to cyberattacks; operational risks inherent in the Group's business; the Group's operations being highly dependent on its IT systems; the Group relying on attracting, retaining, developing and remunerating senior management and skilled personnel and maintaining good employee relations; the Group's risk management framework; and reputational risk), economic and political risk (including in respect of: increased political and economic risks and uncertainty in the UK and global markets; uncertainties surrounding the UK's withdrawal from the European Union; climate change and the transition to a low carbon economy; continued low interest rates; changes in foreign currency exchange rates; and HM Treasury's ownership of RBSG and the possibility that it may exert a significant degree of influence over the RBS Group), and legal, regulatory and conduct risk (including in respect of: the Group's businesses being subject to substantial regulation and oversight; legal, regulatory and governmental actions and investigations; the replacement of LIBOR, EURIBOR and other benchmark rates; and changes in tax legislation).

The forward-looking statements contained in this document speak only as at the date hereof, and the Group does not assume or undertake any obligation or responsibility to update any forward-looking statement to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

The information, statements and opinions contained in this document do not constitute a public offer under any applicable legislation or an offer to sell or solicit of any offer to buy any securities or financial instruments or any advice or recommendation with respect to such securities or other financial instruments.